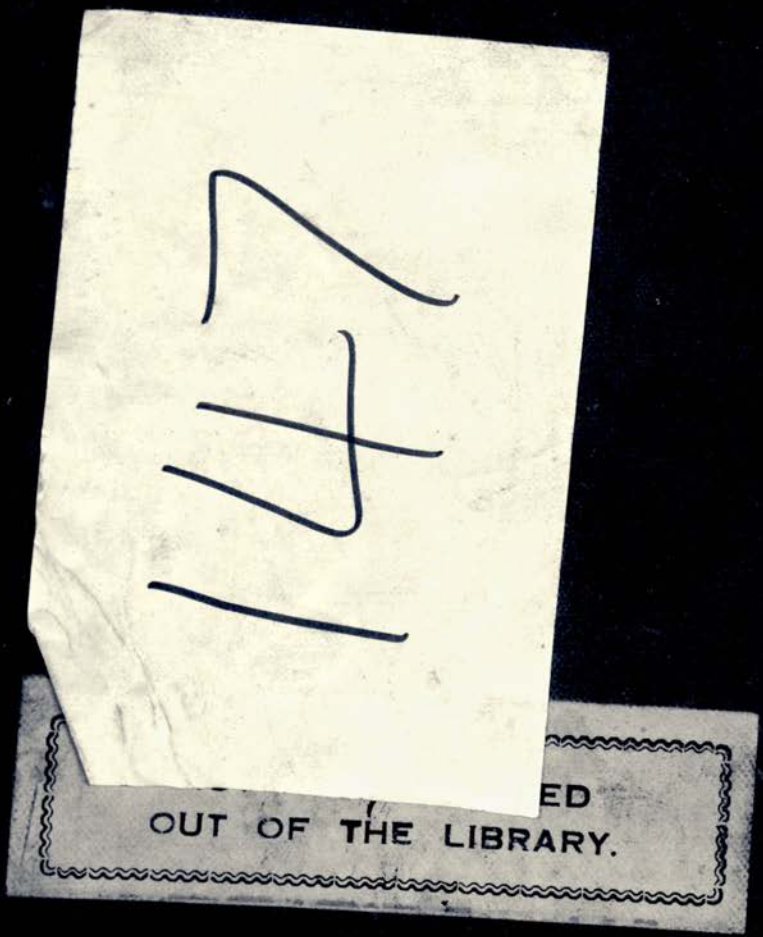
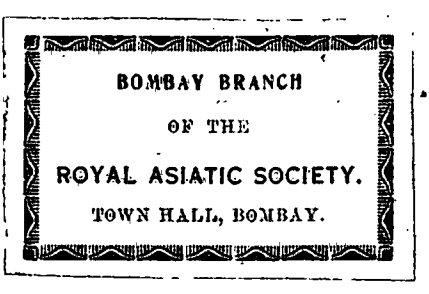


00058976



Digitized with financial assistance from

NSDL
Technology, Trust & Reach

on 07 January, 2017

N.W.P.&O.

THE

HIMÁLAYAN DISTRICTS

OF THE

NORTH-WESTERN PROVINCES OF INDIA.

BY

EDWIN T. ATKINSON, B.A., F.R.G.S.

58976

VOL. II.

(FORMING VOLUME XI. OF THE GAZETTEER, N.-W. P.)

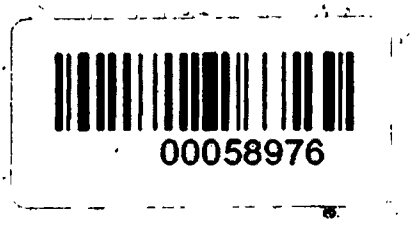
"He who thinks on Himáchal, though he should not behold him, is greater than he who performs all worship in Káshi. In a hundred ages of the gods I could not tell thee of the glories of Himáchal." As the dew is dried up by the morning sun, so are the sins of mankind by the sight of Himáchal" *Skanda-Purána.*

Qx.a. 6

ALLAHABAD:

NORTH-WESTERN PROVINCES AND OUDH GOVERNMENT PRESS.

1884.


00058976

1. Map of Garhwál, in the cover.
2. Trisúl at Bárahát.
3. Facsimile of Pándukeswar plate.

PREFACE.

THE system of transliteration used is the same as in former volumes and need not be given here. With the exception of the alphabetical list of villages, towns and local sub-divisions in the Himálaya of the North-Western Provinces, this volume concludes all that I have undertaken to prepare. Since April, 1876, I have not been in charge of the North-Western Provinces Gazetteer, and what I have done has been accomplished in the few hours of leisure that I could secure for the task and without assistance of any kind. The present volume was prepared for printing during my absence on furlough in 1882-83, and had the disadvantage of being carried through the press in India whilst I was far away from any references. Still, it is hoped that its contents will be found suggestive to many, of the lines that they should take up, not only for the higher aim of aiding in the great work of diffusing a knowledge of India and its peoples, but for the personal aim of following out some study which may give to the student a fresh interest in life and help to dissipate the "general dissatisfaction" which an eternal round of hearing petty cases and going through drills and parades, added to climatic influences, is certain to effect. The materials lie around in abundance whichever way one's tastes may lie, and it has been my principal object in all that has been written, to suggest to the rising generation of officials what they can do, and help them on the way.

The chapter on Zoology is local as far as the Insectæ, but for that division my work reviews the major portion of what has been written regarding the insects of India, excluding British Burmah. It is an attempt for the first time in any European language to take stock, as a whole, of the species that have been described as occurring in India, and is necessarily full of omissions; for it is not in the power of any one to examine thoroughly the vast literature on the subject. Such as they are, these lists are offered as an aid to the student of our Indian fauna, and have been made more useful by a short introduction to each order and a reference to works where the subject will be found explained and illustrated more

fully. A work of this kind is necessary to induce those with time and tastes for investigating our exceedingly rich fauna to proceed with their work, and it is hoped that the publication of these lists will induce many to take to the study of some particular branch of natural history the materials for which have been indicated by me. I am indebted to Mr. Greig, Conservator of Forests, North-Western Provinces, for his interesting notes on the mammalia; to Major G. F. L. Marshall for the list of birds, and to Mr. Theobald for aid in compiling the list of reptiles and land and fresh-water shells. The authorities consulted in the remaining orders are fully noticed by me in the 'References' at foot of each, and the whole represents the outcome of notes made during the last twenty years. The history of the Khasiyas of Kumaon and its rulers up to the publication of this volume has no existence, and what I now give may be fairly taken as an example of what can be done by piecing together facts gathered here and there from writers in Latin, Greek and Sanskrit. Pursuing the Khasiyas or Khasas wherever they have been named by these writers, and all allusions to the Himálaya of the North-Western Provinces and the sacred world-famed shrines of Badarináth and Kedárnáth, we have a fairly-connected history of the people and the country from the very earliest times. The local inscriptions and the records of the neighbouring country of Nepál fill up many a gap and confirm or explain tradition. For tradition, I have had the valuable notes of the late Rudradatta Pant, a learned Brahman of Almora, the results of whose inquiries were transmitted to me by Sir John Strachey. I also examined the records of all suits for revenue-free grants of land, chiefly decided by Mr. Traill, the first Commissioner of Kumaon, and from them obtained copies of the grants made by the earlier rulers, which afford a fair series from the fifteenth century onwards, and confirm in a great measure or correct the data arrived at from traditional sources. They also explain in many instances the reasons for the grants, and thus afford valuable materials for history, and with the local genealogies give a fairly exhaustive and accurate list of the rulers.

The travels of Hwen Thsang have been examined and confirmed, and the sites of Brahmapura and the Amazonian kingdom of the 'Queens of the East,' the *Strí Rájya* of the Puránas, have been ascertained. Tradition connected Kumaon with the celebrated

Vikramáditya, but I have shown that the popular story of that Rája and his era cannot be accepted ; that the Saka era was really established in 79 A.D., to mark the consecration of the Buddhist Saka king Kanishka: but the Vikramáditya era was not used until the eighth century, though dating from 56 B. C., and was the invention of the anti-Buddhist faction. Neither of these eras is connected with the local history of Kumaon.

Another important bye-examination is the question of the connection between the Khasas and Katyúri rulers in Kumaon and the Kho people and Kator rulers in Kashkára at the western end of the Himálaya beyond Kashmír. This connection was suggested by the late Sir H. M. Elliot, and I have examined it so far as my materials allowed, and have afforded the inquirer, by references, means for judging for himself of the correctness or otherwise of the conclusions at which I have arrived (p. 438). One outcome of this digression is the conviction that the time has passed for attributing to the small Aryan immigration to which we owe the Vedas, the origin of all the races who are assumed to be of Aryan blood, and even for holding that all so-called Rajpúts are of Aryan descent. What Aryans were, and how to tribes of common origin the name has been denied, has been noticed ; and it would not be difficult to show that some of our oldest Rajpút tribes are of Baktrian, Parthian or Skythian origin. Indeed, no result of my researches is of more importance than this, that the Aryans of the Vedas were soon absorbed by the indigenous populations and the never-ceasing waves of immigrants, and have left behind them a language and a literature as their most lasting remains. The Khasiyas of Kumaon have as much right to be called an Aryan race in its widest sense as many others with a more established name, but the fact that they have not yet come up to their plains brethren in caste and religious observances still excludes them from the ranks of the twice-born. A close observer can still see amongst them the working of those laws which have in the course of centuries transmuted many a similarly-situated tribe into good Hindús. A prosperous Kumáoni Dom stonemason can command a wife from the lower Rajpút Khasiyas, and a successful Khasiya can buy a wife from a descendant of a family of pure plains pedigree. Year by year the Bráhmanising influence proceeds, and

people are becoming more orthodox in their religious observances and the fanes of the *dii minores* are becoming somewhat neglected. No more powerful influence in this direction exists than the teachings of our educational department, strange as it may seem; but with education comes a fitness for higher employment, and with us in Kumaon, higher emoluments means respectability, and this in turn ensures orthodoxy. The few prayers of the hard-worked cultivator are improved into the lengthened ostentatious services of the well-paid leisure-loving clerk or contractor.

The chapters on religion[1] open up a new survey of the subject. We commence with religion as it is, and work upwards. We have before us a census of nearly one thousand temples, and the analysis of the forms worshipped in them gives us an accurate grasp of the existing phenomena. This accomplished, the historic method is adopted and the history of each form, or rather class of forms, is traced with the result that we find that Buddhism, though nominally dead, yet lives and is still the faith of the masses; for the existing ceremonies and services can be traced back as readily to corrupted Buddhism as to Sivaism. This explains the apparent disappearance of Buddhism in the tenth to the twelfth century, and answers the query which has often arisen in the mind of the thoughtful observer,—how did Buddhism disappear; what were the influences at work which led to the downfall of a religion which for fifteen centuries occupied the thoughts and held the affections of a great section of the Indian people? The answer is clearly, that Buddhism has been absorbed by Sivaism and that both have been influenced to such a degree by the polydæmonistic cults of the aboriginal tribes as to preserve little of their original structure. This mingling of the pre-Brahmanical, Buddhistic and Animistic conceptions has given us the existing Hinduism of the masses, and has had even a considerable influence in moulding the tenets of the more esoteric schools.

Our examination of the religious festivals observed in Kumaon supports these conclusions. The more popular of these are regulated by the solar calendar and the Saka year, and where held according to the luni-solar year, are by no means of Brâhmanical origin. They are the festivals at the two harvests;

[1] These form, with considerable local additions, the substance of a paper read by me before the Asiatic Society of Bengal.

those in honor of the Nágas at the Jeth Dasahra and Nág-panchami, the great Saiva Sákta services of the first nine nights of Chait and Asoj, and the festivals in honor of the rural deities, Ghantakarn, Goril, Chaumu, &c. The sacrifice of kids is a part of almost all the ceremonies on these occasions, young male buffaloes are also offered, and in former times human sacrifices were not uncommon at the temples of the dark half of the consort of Siva. All these facts mark the non-Brahmanical origin of the more popular festivals of the mass of the people. An examination of the *sandhya* or daily prayers and of the services given in the *Dasakarmádi paddkati* or 'manual of the ten rites, &c.,' also shows that the solid portion of the ritual is borrowed from the Tantras, the acknowledged fifth Veda of both Saiva and Bauddha in the tenth century. Most of us have seen the natives of India at their daily devotions and have doubtless wondered what their meditations were, and what the curious movements of the hands within the prayer-bag (*gaumukh*) and muttered words intended. I am not aware that these have ever been the subject of inquiry, or that they have ever been recorded and explained, and now record the *prándyám* and its prefaces after a lengthened practice of them myself. The other portions of the ritual have never been given in such detail, and without them the services cannot be either correctly appreciated or properly understood. Nearly all these ceremonies possess more or less ornate rituals which are full of those mystical formulæ, *dharanis*, *mantras*, *vijas* and *múdras* which appear to have been the fashion all over the world when the Tantras were written—for India has its dark middle ages quite as much as Europe. In nothing is the kinship of race more distinctly shown than in the history of thought in India and in Europe; almost every theory advanced by Greek and Roman thinkers has its parallel in India; and in the kaleidoscopic mass of beliefs to be studied in any considerable Indian town, we can find curious and startling analogies with the broad beliefs of the inhabitants of our European cities. Let this real union help us in our efforts to know each other, and to this end I offer this portion of my last contribution to our knowledge of the North-Western Provinces.

CALCUTTA;
20th March, 1884.

E. T. ATKINSON.

ERRATA.

[List of some of the errata, chiefly due to the fact that the work was printed in India on revised first proofs whilst the writer was in England.]

Page.	Line from top of page.	For	Read
1	8	third	fourth.
4	14	Presbytis schistaceous	Semnopitheeus schistaceus.
5	21, 34	Inuus	Macacus.
8	26	Pachyura indica, *An*	Crocidura cærulescens, *Shaw.*
...	32	Sorex soccatus *Hodgs*	Crocidura murina.
9	1	pygmœvides	pygmœoides.
18	30	Hyœna	Hyœna.
33	1, 16	Nemorhœdus	Nemorhœdus.
44	11	*Hoevon*	*Hoeven.*
45	1	Oaninæ	Caninæ.
46	29	Antelepe	Antelope.
47	4	Rhinaceras	Rhinoceros.
48	5	Drooks	Brooks.
50	(No. 20)	cœruleseens	cœrulescens.
54	(No. 180)	Brochypternus	Brachypternus.
57	(No. 287)	skrike	shrike.
63	(No. 634)	red-hoaded	red-headed.
87	27	*t.* 100	*t.* 77.
88	16	Bene	Ben.
89	14	calathrus	calathus.
105	(Margin)	Rentamera	Pentamera.
118	18	Amœnus	amœnus.
122	37	*colydiadœ*	*Colydiidœ.*
123	19	Palœotrinus	Palestrinus.
125	12	histus	hirtus.
126	14	chatopisthes	chaetopisthes.
127	37	immutablis	immutabilis.
134	21	Metriorrhynchus	Metriorhynchus.
...	35	cœruleomaculata	cœruleomaculata.
135	6	cœruleipeunis	cœruleipennis.
136	14	Octhenonus	Ochthenomus.
...	34	Onyctemis	Onyctenus.
138	15	Blosyrus	Blasyrus.
...	21	peregrmus	peregrinus.
139	25	Enops	Enops.
140	15	Dissosternus	Disosternus.
141	18	Coloborhonbus	Coloborhombus.
142	18	plagithyrsus.	plagithmysus.
143	8	inœqualis	inæqualis.
...	13	lusca	fusca.
...	30	celostena	Celostrena.
...	33	Pharsatia	Pharsalia.
146	1	*classididœ*	*Cassididœ.*
...	10	Aspidomorpha	Aspidimorpha.
...	24	Leucoptera	Laccoptera.
147	1	*Galerucidœ*	*Gallerucidœ.*
148	26	*coccinelidœ*	*Coccinellidœ.*
150	34	*Œ. Edwardsii* of Westwood,	*A. peregrinum* of Olivier.
154	3	virgens	virgeus.

Page.	Line from top of page.	For	Read
161	(under figure) ...	cells	areolets.
166	3 ...	*dele* whole line.	
167	2 ...	Ædrus	Ædnus.
...	28 ...	pulchera	pulchra.
...	...	*dele* cruciata.	
168	12 ...	*dele* humeralis.	
170	20 ...	*dele* dentipes.	
171	13 ...	Metacanthus, *Costa* ...	Berytus, *Serv.*
...	30 ...	*dele* grandis, *Gray*.	
172	13 ...	Lohita	Macrocheraia.
...	19 ...	Antilochus	Odontopus.
...	...	*dele* russus (As. Bur.) *Stål*.	
...	30 ...	*dele* grandis, *Gray*.	
173	13, 14 ...	*dele* Isyndus heros, Endochus famulus.	
...	15 ...	Euagoras	Darbanus.
...	16 ...	*dele* Sycanus collaris.	
...	19 ...	*dele* nigricollis.	
...	20 ...	*dele* costalis.	
...	21 ...	*dele* pulchriventris.	
...	Last line ...	*dele* Ectrichotes.	
174	13 ...	*dele* Androclus granulatus.	
175	17 ...	Lacotrephes	Laccotrephes.
...	...	ruber	rubra.
176	23 ...	Arœa	anœa
...	20 ...	Pomponia, Tibicen, *Stål* ...	[=Pomponia, Tibicon, *Stål.*]
...	33 ...	costalis	circumduota.
178	Omit line 3 ...	...	...
...	5 ...	geminata	gemmata.
...	9 ...	andamaensis	andamanensis.
...	11 ...	vivescens	virescens.
...	19 ...	verisamor	pulchra.
181	30 ...	omit 'mauricianus.'	
182	3 ...	Isagonus	Isogenus.
248	15 ...	omit 'indica *Linn.*'	
274	25, 28 ...	Bâhlikas	Bahlikas.
275	31 ...	somo	somo.[3]
276	3 ...	Achœmonides, Sassanides ...	Achæmonidæ, Sassanidæ.
277	12 ...	Bharatas	Bháratas.
...	...	Aitariya	Aitareya.
279	9 ...	Rishikas	Rishíkas.
282	30 ...	Chándálas	Chandálas.
...	32 ...	Dravirns	Dráviras.
284	7 ...	Siddhásrawa	Siddhashrama.
294	Note ...	with these	with three.
301	Note ...	4 page	4 page 729.
307	Note ...	see page	see page 283.
313	4 ...	Pâtana	Pâbana.
346	37 ...	Mohendra	Mahendra.
347	4 ...	Kateswar	Koteswar.
348	28 ...	Maheshamardini ...	Mahishamardini.
368	Note ...	303	359.
373	3 ...	at	as.
374	...	Bodhisatwa	Bodhisattwa.
376	Note last line but one.	279	282.
384	8 ...	Gandhabhillas	
...	Note line one ...	347, 337, 279	358, 279, 282.
391	Note ...	Appolladotsu	Apollodotus.

Page.	Line from top of page.	For	Read
402	Note 5 add ...	'or rather ostrich's eggs' ...	
465	29 ...	Guhjísware	Guhjeswarí.
469	8 ...	'actual records of' ...	important records ascribed to.
522	22, 32 ...	Nálu	Nalu.
530	22 ...	Gorkhálś	Gorkhálís.
541	25 ...	*sir*	*sir*.
548	12 ...	protion	portion.
555	17 ...	*faujádrs*	*faujdárs*.
561	last line ...	invoked	invoke.
585	1 ...	shall	should.
610	12 ...	which	an arrangement which.
...	26 ...	Káthmándu	Kathmándu.
626	25 ...	description	disposition.
677	26 ...	Bradashaw	Bradshaw.
713	19 ...	the	thy.
721	19 ...	though	through.
752	20 ...	*Prájna*	*Prajna*.
769	10 ...	after 'since' add ...	'then'.
780	27 ...	Udyat chandeswar ...	Udyotchandeswar.
795	1 ...	gop	god.
801	last line ...	Naikrini	Naikuni.

CONTENTS.

CHAPTER I.

(ZOOLOGY. *Vertebrata.*)

Page.

MAMMALS: Domestic cattle: Sheep: Shawl-wool: References. Tibetan fauna. Birds: References. Reptiles: References. Fishes: References, 1—86

References 44, 72, 78, 86

CHAPTER II.

ZOOLOGY (*Invertebrata.*)

Land and fresh-water shells. Arachnida. Insects. Coleoptera. Orthoptera. Hemiptera. Neuroptera. Lepidoptera. Hymenoptera. Diptera, Myriapoda. References at the end of each section ... ... 87—266

CHAPTER III.

HISTORY.

Law of distribution. Khasas. Bhotiyas. Immigrants. Sources of information. Vaidik geography. Vaidik ethnography. Aryas and Dasyus. Itihása period. Nágas on the Jumna. Pándavas retire to the Himálaya. Manu. Allusions to Badari in the sacred texts. Pauránik period. Discovery of Kailás. The Puránas. The fashioning of the earth. Meru. Boundaries of Meru. Local geography in the Brahmánda and Váyu Puránas. The Mánasa-khanda of the Skanda Purána. The Kedára-khanda... 267—350

CHAPTER IV.

HISTORY—(*contd.*)

Asoka's edicts in Dehra Dún: Pliny, Ptolemy. Pauránik ethnography. Identification of the names of countries and races. Mahábhárata: Summary: Kirátas. Rájya-Kirátas: Customs of the Rájis: Bhotiyas: Doms: Tháru: Bhuksas: Sakas: Nágas. Nágas in Nepál and Kumaon: Khasas: Khasiyas are Hindús: Kators of Kábul. Sakas of Kábul: Greco-Baktrian kings of Kábul. Brief sketch of Baktrian history. Euthydemus. Dates on Baktrian coins. Successors of Eukratides. Decline of the Greek power. Yavanas in the Hindú records. Baktria. Chinese annals. Geography according to the Chinese records. Kadphises and Kanerki. Vikrama and Saka eras. Legends. The nine gems. Abu Rihán Al Birúni. Observations on Al Birúni's account. Chronicles of Kashmír. Early use of the Saka era. The origin of the Vikrama era. Further history of the Yueh-ti. Hwen Thsang. Musalmán historians. Modern inhabitants of the tract between the Hindu-kush and the Indus. Conclusions... 351—442

CHAPTER V.

HISTORY—(*contd.*)

Page.

Early history from local sources. Garhwál Rájas. Hwen Thsang. Brahmapura. Tradition regarding Lakhanpur. The golden land. The colonisation of Juhár. The Amazonian kingdom. Tibet from Chinese sources. Govisana. Annihilation of Buddhism. Sankara Acharya. Sankara in Nepál. Katyúris or Katyúras. Kárttikeyapura. Inscriptions. Pandukeswar plates. Second series of Rájas. Facsimile of one of the plates. The Kumaon and Pála plates. Localities. Countries conquered. Bhágalpur plate. Tibetan records. Sárnáth inscription. Pála dates. Decline of the Katyúris, 443—496

CHAPTER VI.

HISTORY—(*contd.*)

Rise of the Chands. Chand chronology. Earlier dates cannot be accepted. Harak Deb's statement. Sombansis of Jhúsi. Káli Kumaon. Som Chand. Atma Chand and his successors. The Khasiya revolt. Malla Rájas. Kráchalla Deva. Chand restoration. Musalmán historians. Garur Gyán Chand. Revolt of Nalu Kathayat. Early history of Garhwál and Dehra Dún. Siwálik hills. Timúr Lang. Garhwál Rájas. Udyán Chand. Bhárati Chand. Ratan Chand. Pedigree of the Doti and Askot families. The Bam Rájas of Sor. Kírati Chand. Conquest of Bárahmandal and Páli. Pedigree of the Páli Katyúris. Conquest of Phaldakot and Kota. Partáp Chand. Tára Chand. Mánik Chand. Khawás Khán. Bhíshma Chand. Bálo Kalyán Chand. Conquest of Sor. Rudra Chand. Husain Khán Tukriyah. Tarái and Bhábar Kumaon in the *Ain-i-Akbari*. Tarái. Attempt on Sira. Rájas of Sira. Attempt on Badhángarh and conquest of Katyúr. Lakshmi Chand. Invasion of Garhwál. Dhalíp Chand. Bijaya Chand. Trimal Chand. Báz Bahádur Chand. Invasion of Garhwál. Extradition of Sulaimán Sháh. Administration. Conquest of Bhot. Invasion of Garhwál. Eastern Kumaon. Udyot Chand. Gyán Chand. Jagat Chand. Fateh Sáh of Garhwál. Pradípt Sáh. Lalat Sáh. Jayakrit Sáh. Pradhuman Sáh. Umed Singh. Sikhs and Gujars. Debi Chand. Ajít Chand. Kalyán Chand. The Rohillas. Quarrels with Oudh. Díp Chand. Intestine disputes. Murder of Sib Deo. Mohan Singh murders the Ráni. Harak Deb Joshi. Mohan Singh murders Jaikishn Joshi and Díp Chand. Native administration of the Tarái. Pradhuman Sáh or Pradhuman Chand. The Joshiyána raid. Sib Singh. Mahendra Singh. Gorkhálí conquest, 497—606

CHAPTER VII.

HISTORY—(*concluded.*)

The Gorkhális. Ran Bahádur invades Kumaon. Invasion of Garhwál. Chinese attack Nepál. Attempts by the family of Lál Singh to recover Kumaon. Gorkhálí administration of Kumaon. Ran Bahádur retires to Benares. Harak Deb. Ran Bahádur returns to Nepál. Garhwál and the Dún under the Gorkhális; their punishment on defeat. Gorkhális in Kumaón, their forces and the administration of justice. Causes of the Nepál war,

Page.

Aggressions on the Gorakhpur frontier. Fruitless negotiations. Búlwal. Opening operations of the war. Invasion of the Dún. Kalanga. From the fall of Kalanga to the invasion of Kumaon. Mr. Gardner appointed to political charge. Annexation determined on. Preparations for the invasion of Kumaon. Disposition of the forces. Advance on Ránikhet. Gorkhális occupy Kampur. British occupy Siyáhi Devi. Gorkhális retire to Almora. British occupy Katármal. Captain Hearsey's operations in Eastern Kumaon, is defeated at Khílpati and taken prisoner. Action at Gananáth. Capture of Almora. Bam Sáh and the Gorkhális retire to Doti. Mr. Gardner in civil charge with Mr. Traill as assistant. Long negotiations regarding peace with Nepál. At length peace is concluded. Garhwál affairs. British administration under Traill, Batten and Ramsay ... ... 607—698

CHAPTER VIII.

RELIGION.

Religion in India: in the Himálaya. Dæmonism. Kumaon's place in the history of religion in India. Vishnu in the Vedas. Rudra. Brahma unknown. Vishnu in the epic and Pauránik periods: as Ráma: as Krishna. Sisupála opposes Krishna. Duryodhana, Sálya and Karna. Krishna only a partial incarnation of Vishnu. Nara and Náráyana. Krishna one with the Supreme Being. Maháđeva glorifies Krishna. Krishna praises himself. Brahma praises Krishna. Exploits of Krishna. The later Rudra. Mahádeva. Interpolations in the epic poems. Contests between the Saivas and Vaishnavas. Ráma. Daksha's sacrifice. Contest between Rudra and Náráyana. Contest between Krishna and Bána. The false and the true Vásudeva. Reconciliation of Siva and Vishnu. The modern Siva a non-Bráhmanical deity. Sakti. Linga. ... ... 699—740

CHAPTER IX.

RELIGION—(*contd.*)

Buddhism, Sákya Muni. Caste. Lassen on Buddhism. Buddhist scriptures. Gods and genii. *Vinaya Pitaka. Abhidharma Pitaka.* The schools of Buddhism. The *Dhyáni* Buddhas. Magic. *Dhyánas: dháranis.* Spread of magical rites. Monotheism becomes polytheism. The Tantras. Further assimilation of Saiva practices. Buddhism in Nepál. Bonpas of Tibet. Sankara Achárya. His works and teaching. Siva. Pasupati in Nepál. Pasupati. Kedárnáth. Túngnáth and Rudrnáth. Other Saiva temples. Kamaleswar. Jageswar. Names of Mahádeo. Bágeswar. Vishnu, Badrináth. Pándukeswar. Briddh-badri. Bhyán-badri. Painkhanda. Jyotirdhám. Other Vaishnava temples. Saktis of the Himálaya. Uma. Nanda. Ambika. Gauri. Durga. Mahisha-mardini. Tripura-sundari. Káli. Chámunda. Chandika. Sítala. Mátris. Vaishnava Saktis. Kárttikeya. Ganesha. Súrya. Hanumán. Garur. Dattátreya. Parásura. Mándhátа. Kapila. Agastya Muni. Ghatotkacha. Gorakhnáth. Existing temples. Local deities. Satyanáth. Ráj-rajeswari. Ghantakarn. Bholánáth. Gangnáth. Masán. Goril. Kshetrpál. Airi. Kalbisht. Chaumu. Haru. Katyúris. Bádi. Nága worship. Mahásus. Conclusions. Sikhs and others, 741—842

CHAPTER X.

RELIGION—(*concluded.*)

Page.

The Kumaon calendar. Solar year. Luni-solar year. Festivals governed by the luni-solar year in Chait, Baisákh, Jeth, Asárh, Saun, Bhado. *Nág-panchami. Srádddh paksh* of Asoj. *Asoj naurátri.* Kárttik. Mangsir. Púa. Mán. Phágun. Shiurátri. Festival at Jageswar. Gosains. Jángamas. Kánphatas. Sákti ceremonial. Sacrifices. Holi. Festivals regulated by the solar year and held at each *Sankránt.* Mín. Bikh. Kark. *Bagwáli.* Sinha. Makar. Domestic ritual. Introductory. Daily worship. Invocation of blessing. Worship of Ganesha. Invitation, throne, &c. Worship of the Mátris. The joyful ceremonies for ancestors. Consecration of the water vessel. Tying on the amulet. On the birth of a son. Worship of Shashthi. Naming a boy. Birth-days. Piercing the ear. The nine planets: their worship and ritual. Shaving the head. Becoming a religious student. Saluting the preceptor. Marriage. First visit. The marriage ceremony. The second visit. The *Arka* marriage. The *Kumbh* marriage. Other ceremonies for special occasions. Rites for those born in the *Múla* or *Aslesha* lunar-mansions. Funeral ceremonies ... ... 843—934

Index ... ... 935—964

THE

HIMÁLAYAN DISTRICTS

OF THE

NORTH-WESTERN PROVINCES.

PART II.

CHAPTER I.

Zoology (Vertebrata).

CONTENTS.

Mammals: Domestic cattle: Sheep: Shawl-wool: References. Tibetan fauna. Birds: References. Reptiles: References. Fishes: References.

The fauna of Kumaun is as varied as its flora, but up to the present, with the exception of the mammalia, birds, fishes, and butterflies, it has not received the attention to which its interesting character and position entitle it. The materials for the two following chapters were collected with a view to give an account of the fauna of the North-Western Provinces, and the portion comprising the mammals and birds of the plains has already appeared in the third volume of the *Gazetteer*. We shall here confine ourselves to the mammals, birds, reptiles, and fishes of the hills. For the remaining orders it has not been possible (except in the case of butterflies) to separate the species common to the hills and plains from those only found in the hills and those only found in the plains, or indeed to distinguish clearly between the species proper to upper India and those found in other parts of India. This difficulty arises chiefly from the careless notation of locality adopted by the older writers on natural history, who were the first to describe many species, and whose names therefore stand to the present day and cannot be ignored. The word 'India' or 'Indes-orientales' attached as the locality to the descriptions of species, up to very recent

times, comprises widely different places. From indications it would appear to include in some instances the Phillipine islands, the islands of the Malay archipelago and other countries which the writer placed without specification in his ideal Indian region. In the same manner the words 'North-India' and 'North-Bengal' sometimes mean Asám and sometimes the North-Western Provinces and the Panjáb, so that to rediscover these species and assign them to their proper localities remains one of the objects which the present generation of observers should place before themselves. In the words of Wallace[1] :—"It is admitted that a knowledge of the exact area occupied by a species or a group is a real portion of its natural history, of as much importance as its habits, its structure or its affinities; and that we can never arrive at any trustworthy conclusions as to how the present state of the organic world was brought about, until we have ascertained with some accuracy the general laws of the distribution of living things over the earth's surface." Mr. W. Blanford has divided India into a series of provinces which would suit our purpose with the addition of the precise locality. They are (1) the Panjáb province or sub-region, including the Panjáb, Sind, Kachh and western Rajputána: (2) the Indian province, including the rest of the Peninsula and northern Ceylon, except the Malabar and Eastern-Bengal province: (3) the Malabar province, comprising the low country on the west coast of India from Cape Comorin to a little north of Bombay and the range of hills along the same coast as far north possibly as the Tápti river and also the hill tracts of southern Ceylon: (4) the Asám (Eastern-Bengal) province, limited by a line drawn northwards from the head of the bay of Bengal. The Indian province is further divided into sub-provinces :—(1) the Gangetic sub-province or Hindustán extending south as far as the Narmada, and in its eastern portion comprising only the valley of the Son and that of the Ganges as far as Benares: (2) the Deccan sub-province stretching from the Narmada to the Krishna; bounded on the east by a line drawn north and south a little east of Nágpur, and on the west by a line drawn a little east of the crest of the Western Ghâts or Sahyádri range: (3) the Bengal sub-province, bounded on the west by the preceding and extending as far south as the Godávari: (4) the Madras sub-

[1] Island life, p. 13.

province includes the remainder of southern India and the plains of northern Ceylon. An insect caught at Allahabad should be labelled "Hind. (All'd.)," by which the province and precise locality is at once distinguished. We need hardly remark that the geographical distribution of animals is one of the most interesting branches of natural history and one that leads indirectly to results bearing on the most important biological questions of the day.

In the following pages, with the exception of the birds and butterflies, the lists do not pretend to be exhaustive or to be in all cases quite up to the most recent and approved systematic arrangement. With the small leisure and the smaller materials for reference at my command it would be hopeless to attempt completeness. The lists of the Arachnida and Insecta are compiled from my note-books and include the jottings-down of many years. Where the word 'India' has been given as the locality from which a recorded species was received, no mention of the locality is given in the lists; but where any part of India is distinctly indicated, it is noted in brackets.[1] Many of these localities may have been given in error, but for this the list is not responsible. The references at the foot of each section include the authorities from which many of the names of Indian species have been taken, and a short notice under each order will give a very general idea of the animals belonging to it and the sources of my information. It is with much reluctance that these imperfect notes are submitted in their present form, but the knowledge that opportunity for revision and completion will probably never occur and that they are the only ones of their kind yet available has wrung an unwilling consent to their publication, in the hope that

[1] The following abbreviations have been used:—

As.	for	Asám, including Sílhat, Kachár, Sikkim, Nága hills.
Ben.	„	Bengal: evidently used in a broad sense.
Bom.	„	Bombay: includes the presidency.
Cal.	„	Calcutta.
Cen. In	„	Central India: used loosely.
Dec.	„	Deccan, especially Púna.
Him.	„	Himálaya.
In.	„	All India: used where the insect is recorded from Mad., Bom., B .,
Mad.	„	Madras: includes Carnatic, Coromandel coast.
Mal.	„	Malabar.
Mus.	„	Mussooree.
Nep.	„	Nepál.
N. I.	„	North India: either Hindustán or Asám.
N. B.	„	North Bengal: chiefly N.-W. Provinces and Oudh.
Níl	„	Nílgiris, in Madras.
Panj.	„	Panjáb.

they may induce others with more time and better materials to give us a complete history of the lesser forms of animal life in India.

MAMMALIA.

Mammals.

So much has been written about the mammals of India that in the present list of the principal species that are found in Kumaun, a reference to Jerdon or some other authority is alone made, which with the notes on the papers of Hodgson and others at the end of the section will sufficiently indicate the sources of more precise information. For the local notes on the Mammalia I am indebted to Mr. G. Greig, Conservator of Forests, who has kindly placed the results of some fifteen years' observation of the wild animals of these hills in my hands.

SIMIADÆ—Monkeys.

Presbytis schistaceous, Hodgson—Himálayan Langoor—*Gani-langúr.* Jerdon, 6 : Hodgson, J. A. S. Ben., IX., 1211.

Large herds of this handsome monkey are commonly to be met with throughout the wooded portions of the hills, from the dense jungles of the submontane tract up to the oak and fir forests at 12,000 feet above the level of the sea. The *langúr* feeds on wild-fruits and flowers and on the buds and young leaves of many trees and plants, but acorns form its chief food from August to February, and during those months it is found in all the great oak forests. Potatoes, when procurable, are greedily eaten, but it seldom attacks other cultivated crops. It may, however, occasionally be seen stealing into a garden to feed on the buds and tender leaves of the rose. The *langúr* is very common about Naini Tál and Mussooree and in the mixed forests of the Bhábar, where it often falls a prey to the stealthy leopard that lies in wait for it at the foot of a tree. It is probable that the species which frequents the forests of the submontane tract in the cold season migrates to the outer range in summer, but it does not go far into the interior, and the species that is found to the north of the outer range of hills appears to be permanently resident there and is found there at all seasons of the year. It is a curious fact that the deer known as *sámbar, chital,* and *gural* are frequently seen near a herd of *langúrs.* The two former may keep near the monkeys for the sake of the fruit that is shaken from the trees, but the *gural* cannot have such an object in view as

it does not eat fruit. He may, however, desire the society of the *langúrs* for protection, since there is no animal more quick of hearing. The *langúr* is frequently the first to give notice of the approach of a leopard or tiger. In evidence of the friendly feeling that exists between these monkeys and the deer tribe it may be worth recording that a herd of *chital* has been seen feeding under a tree, whilst the *langúrs*, hanging from the branches, playfully touched the backs of the deer with their fore-hands. *Langúrs* are easily tamed and differ from the Bengal monkey in not being mischievous or vicious. One had the run of a vegetable garden and used to feed on the peas without doing any further damage, finishing one pod before taking another. He was very amiable and indolent, resting on a branch all day after his meals until he got hungry again. He was never angry with anyone or anything and never appeared to imagine that dogs or men could attempt to do him any harm. The Himálayan *langúr* is easily distinguished from the Bengal *langúr* (*P. Entellus*) by its hands being concolorous with its body and by its loud grunting note of alarm, whilst the hands of the latter are jet black and its voice is more of a deep bass mournful bellow.

Inuus Rhesus, Desm.; *I. erythræus,* Schr.; *Pithex oinops,* Hodgson—The Bengal monkey—*Bandar.* Jerdon, 11: Hodgson, J. A. S. Ben., IX., 1211.

This is the common red-faced and red-callositied monkey found all over these provinces and extending in the Himálaya up to 7,000 feet. It feeds on many sorts of grain, fruits, flowers, buds and leaves and even insects, such as locusts and grasshoppers. The herds generally establish themselves on a steep bank in a mango-grove near a village or in forest or precipitous ground near outlying cultivation, whence they emerge when unobserved and do immense damage to cultivated crops. They are mischievous, treacherous and dirty in their habits and do not form desirable pets.

Inuus Pelops, Horsfield—Hill monkey. Jerdon, 11.

Major Hutton obtained this monkey from the interior of the Mussooree hills, where it replaces *I. Rhesus* at high elevations, but the difference between the two species is not well established.

CHIROPTERA.

Pteropus medius, Tem. c *P. Edwardsii,* Geoff. : *leucocephalus,* Hodgs. : *assamensis,* M'Call.—Flying-fox—*Changidari.* Jerdon, 18 : Hodgson, J. A. S. Ben., IV., 700 : Tickell, Cal. J. N. H., III., 29 : Dobson, 18.

This species is common throughout the Tarái and feeds on fruits, wild and cultivated.

Cynopterus marginatus, Geoff. ; *Pteropus pyrivorus,* Hodgs.—Small fox-bat—*Chhoti changidari.* Jerdon, 20 : Hodgson, J. A. S., Ben., IV., 700 : Dobson, 24.

Common throughout all India, feeding on fruits, wild and cultivated.

Rhinolophus luctus, Tem.—Large leaf-bat. Jerdon, 23 : Hodgson, J. A. S., Ben., XII., 414 : (*R. perniger?*), Dobson, 39.

Procured from Mussooree, Nepál, Darjíling.

Rhinolophus mitratus, Blyth—Mitred leaf-bat. Jerdon, 24 : Blyth, J. A. S., Ben., XIII., 483 : Dobson, 42.

Procured from Mussooree.

Rhinolophus ferrum-equinus, Schreb.; *tragatus,* Hodgs.—Dark-brown leaf-bat. Jerdon, 24 : Hodgson, *l.c.,* IV., 699 : Dobson, 53.

Procured from Mussooree and Central Nepál.

Rhinolophus Pearsonii, Horsf.—Pearson's leaf-bat. Jerdon, 25 : Dobson, 43.

Common about Mussooree, procured at Darjíling.

Rhinolophus affinis, Horsf. ; *Rouxii,* Tem.—Allied leaf-bat. Jerdon, 25 : Dobson, 47.

Procured at Mussooree.

Rhinolophus garoensis, Dobson. Mon., 48.

Procured at Mussooree.

Rhinolophus macrotis, Hodgs. Large-eared leaf-bat. Jerdon, 26 : Hodgson, *l.c.,* XIII., 485 : Dobson, 45.

Procured from Nepál and Mussooree, but rare.

Phyllorhina armiger, Hodgson—Large horse-shoe bat. Jerdon, 27 : Hodgson, *l.c.,* IV., 699 : Dobson, 64.

Procured from Mussooree, Nepál, Darjíling.

Phyllorhina diadema, Geoff. ; *H. nobilis*, Cantor. Dobson, 61.

Procured from Dehra Dún.

Phyllorhina speoris, Schneider.—Indian horse-shoe bat. Jerdon, 27 : Dobson, 67.

Procured in Dehra Dún and near Púna.

Phyllorhina bicolor, Tem. Dobson, 70.

Procured in Dehra Dún.

Phyllorhina fulva, Gray. Dobson, 72.

Procured at Hardwár.

Megaderma Lyra, Geoff. ; *M. carnatica*, Ell. ; *M. schistacea*, Hodgs.—Large-eared vampire bat. Jerdon, 22 : Hodgson, J. A. S., Ben., XVI., 889 : Blyth, *Ibid.*, XI., 225 : Dobson, 78.

Not uncommon in the submontane tract. Blyth has shown that this species sucks the blood from other bats. Attaching itself firmly behind the ear it sucks the blood during flight and when its victim falls exhausted, devours it.

Plecotus auritus, Linn. ; *P. homochrous* and *darjilingensis*, Hodgs.—Long-eared bat. Jerdon, 47 ; Hodgson, *l.c.*, XVI., 894 : Dobson, 84.

Same as the European species ; found throughout the hills, Simla, Mussooree.

Vesperugo noctula, Schreb. ; *Vespertilio labiata*, Hodgson. Jerdon, 36 ; Hodgson, *l.c.*, IV., 700 : Dobson, 89.

Procured from the central region of Nepál.

Vesperugo serotinus, Schreb. ; *Vespertilio noctula*, Geoff.—Silky bat. Jerdon, 34 : Dobson, 109.

Procured beyond Mussooree, rare.

Vesperugo Leisleri, Kuhl—Hairy-armed bat. Jerdon, 34 : Dobson, 91.

Common in the valleys beyond Mussooree.

Scotophilus Temminckii, Horsf. ; *V. castaneus*, Gray—Common yellow bat. Jerdon, 38 : Dobson, 120 : J. A. S., Ben., XX., 157.

Found all over India and reported from Dehra Dún and the Tarái.

Vespertilio mystacinus, Leis. Dobson, 133.

Found throughout the Himálaya.

Vespertilio murinus, Schreb. Dobson, 137.

Found throughout the north-west Himálaya.

Vespertilio murinoides, Dobson. Mon., 138 : J. A. S., Ben., XLII., ii., 205 : Jerdon, 46.

Found in Chamba and Mussooree.

Vespertilio nipalensis, Dobson. Mon., 141.

Procured from Nepál.

Harpiocephalus griseus, Hutton. Dobson, 154.

Found in Mussooree.

Harpiocephalus leucogaster, Edw. Dobson, 157.

Found in the north-west Himálaya and Tibet.

Murina formosa, Hodgs.; *Nycticejus Tickellii*, Blyth—Beautiful bat. Jerdon, 42; Hodgson, J. A. S., Ben., IV, 700.

This beautiful yellow bat has been procured from Sikkim. Nepál, and the Himálaya, also from Central India.

TALPIDÆ.

Talpa micrura, Hodgs.; *T. cryptura*, Blyth—Short-tailed mole. Jerdon, 51; Hodgson, J. A. S., Ben., X., 910; XIX., 217.

Procured from Darjíling, Nepál, and Kumaun.

Talpa macrura, Hodgs.—Long-tailed mole. Jerdon, 51; Hodgson, J. A. S., Ben., XXVII., 176.

Procured from Sikkim, doubtful in Kumaun.

SORICIDÆ.

Pachyura indica, Ani.; *Sorex cœrulescens*, Shaw—Musk-shrew, musk-rat—*Chachundar*. Jerdon, 53.

Common throughout the hills and plains, procured at Naini Tál, Almora and Mussooree, possibly imported in baggage.

Sorex Tytleri, Blyth—Dehra shrew. Jerdon, 56.

Procured from Dehra Dún.

Sorex soccatus, Hodgs.—Hairy-footed shrew. Jerdon, 57: Hodgson, Ann. Mag., N. H., XV., 270.

Procured from Sikkim, Darjíling, Nepál, and Mussooree.

Crocidura pygmœoides, And.; *Sorex micronyx,* Blyth—Small-clawed pigmy shrew. Jerdon, 58: Blyth, J. A. S., Ben., XXIV., 33: Anderson, *Ibid.*, XLVI., ii., 279.

Procured from Kumaun and Mussooree.

Erinaceus Grayii, And.; *E. collaris,* Gray—North Indian hedge-hog. Jerdon, 62.

Doubtfully in Dehra Dún: for synonymy of the Indian hedge-hogs see Anderson in J. A. S., Ben., XLVII., ii., 195.

URSIDÆ.

Ursus Isabellinus, Horsf.—Brown bear—*Lál-bhálu, bhura.* Jerdon, 69.

This is the red, gray, or silver or snow bear of sportsmen. It is found in Dárma and Byáns, but, strange to say, it has not been distinctly noticed between the Pindar and Trijogi-Naráyan on the ridge separating the Mandákini from the Bhilang. To the west it occurs throughout native Garhwál and Bisahr to Kashmír and also across the passes in Tibet. As a rule it seeks the upper ranges, living along or above the upper limit of forest far away from the haunts of man and feeds on roots, weeds, grasses and even insects, lizards and snakes. It trusts almost entirely to its sense of smell to detect the presence of an enemy, and with a favourable wind will distinguish a man fully a quarter of a mile off. Its powers of sight are, however, so weak that it is one of the easiest of the larger animals to stalk and shoot. In one case, the wind being favourable, a sportsman was able to creep up to within fifteen feet of a brown bear that was feeding on a slope without alarming it. In some places this bear visits the maize plantations and the orchards, and in many places solitary males take to sheep-stealing and commit great havoc amongst the mountain flocks. Owing to the formation of its claws, it is a bad climber and seldom mounts a tree. As a rule, the brown bear is a timid animal and disinclined to fight, but instances are not wanting in which it has shown considerable determination and courage. It hybernates from December to March, retiring to a hollow in the rocks or under the roots of a large tree. The fat that has accumulated in the summer is all absorbed during the long sleep, and in April the bear awakes thin and ragged, the stomach quite empty and the fur full of scurf. The brown bear

pairs about August, and the young ones, generally two, are produced in April or May. It is very partial to raw flesh and readily eats one of its own kind when the skin has been removed, as well as the carrion of cows that have died from disease or accident. See note on Horsfield's description in Cal. J. N. H., III., 268.

Ursus tibetanus, Cuv. : *torquatus,* Schinz.—Himálayan black bear—*Ŕichh, bhálu.* Jerdon, 70.

This bear is very commonly met with all through the hills from the Tons to the Sárda and from the upper limits of vegetation down to as low as 3,000 feet. It has been procured at Gorighát on the Ganges about eight miles above Hardwár, but is, however, seldom seen in the lower hills except during winter. It climbs trees far better than the brown bear and frequently mounts them to plunder the combs of the honey-bee. The black bear is very destructive to such crops as maize, *mandua,* buckwheat and gourds. It is also exceedingly fond of fruit, such as apricots, peaches, apples and walnuts, and occasionally grazes on green wheat and barley when they are young and succulent and before the ear has formed. At times, when cultivated fodder is not procurable, it feeds on acorns, the young shoots of the *ningál* (hill bambu) and other jungle fruits, roots and grasses. Both the black and the brown bear devour beetles, grasshoppers and locusts and eat flesh both fresh and putrid. Occasionally one takes to killing and eating sheep, but an old resident well acquainted with these hills declares that in his experience he has only known of one case in which a black bear had become a confirmed sheep-stealer. This was a very large old male covered with scars and bearing the marks of three bullet wounds. He cared neither for men nor dogs and died fighting bravely to the last. The black bears of the upper ranges hybernate, but those of the lower hills do not. They show more fight than the brown bear and many villagers are mauled by them every year. As a rule, the black bear will never touch a man if the man shows a bold front, but if he is come upon suddenly and at close quarters and the man turns to run, the courage of the bear rises to the occasion and he follows the man and claws him on the head and face.

The bear usually charges on all fours at a gallop like a great dog, with its mouth open and emitting a loud angry grunt at almost

every stride. Those that live in the upper ranges produce their cubs, usually two at a time, in April-May, but those frequenting the lower ranges are not so regular in their habits. All make their dens in naturally-formed caves, and to these the female retires during the period of gestation and old and young seek a refuge in them when pursued. The black bear has almost if not quite as inferior a sense of sight as the brown bear and an equally keen sense of smell. It is more intelligent and can easily be tamed, but, strange to say, if noosed by the foot in a trap and unable to break away by force, it never attempts to sever the rope or sapling to which the gin is attached and remains a prisoner until it dies or is killed. This fact is vouched for by a well-known sportsman. Black bears are sometimes killed by tigers, and specimens have been procured which bore unmistakeably the marks of a tiger's claws and teeth. It is doubtful whether *Ailurus fulgens*, Cuv., the red cat bear, the *wáh* of Nepál and *bhauna ríchh* of the west, occurs in these provinces. It has been procured in Nepál and may be easily recognised from the deep ochreous red colour of the head, and its face, chin and ears within being white. It is reported as having been found to the west and east of our limits and may possibly occur within them. See Jerdon, 74 : Hodgson in J. A. S., Ben., VI., 560.

Ursus labiatus, Blain ; *Bradypus ursinus*, Shaw ; *Melursus lybicus*, Meyer—Sloth bear—*Jábar*. Jerdon, 72.

This bear hardly bears out its English appellation, for it can run fairly fast and is not of slothful habits. It is found all through the *sál* forests of the lower hills and in the Tarái, where it is frequently met with in swampy ground and marshes and is much feared by elephants. Its principal food is ants, beetles, grasshoppers, fruits, roots, and honey, and it probably also consumes frogs, fish and flesh when it can lay hold of them. Its powers of suction and propelling wind from its mouth are remarkable. With its powerful claws it scrapes a large hole at the base of a white-ant's nest, then blows away the dust and sucks out the larva. It is especially fond of the fruit of the *mahua*, *jáman*, and *D. Melanoxylon*. The young are produced at various times, but usually about December to January, and in March they are able to accompany their mother in her travels. They are easily tamed and become quite tractable. See Tickell's paper, Cal. J. N. H., I., 199.

MELIDIDÆ.

Mellivora indica, Shaw ; *Ursitaxus inauritus*, Hodgs.—Indian badger—*Biju*. Jerdon, 78 : Hodgson, As. Res., XIX., 60 ; J. A. S., Ben., V., 671.

This species is not uncommon in the submontane tract and lower outer hills. Specimens have been procured at Rámnagar and in the Pátlí Dún. It feeds on rats, mice, birds, frogs and insects, and is often very destructive to poultry It probably also feeds on honey when procurable.

MUSTELIDÆ.

Martes flavigula, Bodd. ; *Hardwickei*, Horsf.—Black-capped marten—*Chitrola, titarola*. Jerdon, 82.

This very common animal is very destructive to game in Kumaun and occurs almost from the southern boundary up to the limits of vegetation. It is on the move all hours of the day and generally hunts in pairs, though as many as ten have been seen hunting together at the same time. It is a very fair runner on the ground and as active as a squirrel in trees and is perhaps the boldest of all the minor carnivora. Some dogs chased a pair and caught one whilst the other took refuge in a tree ; although the owner of the dogs was standing by encouraging them to kill the one that had been caught, the other came down from the tree and vigorously attacking the dogs perished in defence of its companion. Natives say that martens kill small deer and they are certainly very destructive to poultry. They travel great distances and are constantly changing their ground, so that it is difficult to meet with them.

Mustela sub-hemachalana, Hodgs. ; *M. humeralis*, Blyth—Himálayan weasel. Jerdon, 83 : Hodgson, J. A. S., Ben., VI., 563.

This small animal frequents the walls of terraces and houses that have been built of dry masonry, but is nowhere common.

Mustela Kathiah, Hodgs.—Yellow-bellied weasel—*Káthiya-nyúla*. Jerdon, 83 : Hodgson, J. A. S., Ben., IV., 702.

Said to occur in eastern Kumaun.

Mustela Erminra—Stoat, ermine.

Specimens have been procured from Jaunsár and Bisahr and it is common in Lahúl, Spiti, and Tibet. Jerdon, 84.

Lutra Nair, Cuv.; *tarayensis,* Hodgs.; *chinensis, indica,* Gray—Common Indian otter—*Ud, ud-billao, pan-ud.* Jerdon, 86: Hodgson, J. A. S., Ben., VIII., 319.

This otter is found throughout the Tarái and in all the larger streams along the foot of the hills, ascending the rivers to thirty miles and perhaps more. It is difficult to determine where it gives place to the hill otter. It usually hunts in parties of five or six, though as many as twelve have been seen together in the Rámganga in the Pátli Dún and twenty in the Súswa in Dehra Dún. The skin must be 'plucked' before becoming the beautiful otter fur so popular for the trimming of ladies' dresses. It is better to pluck the skin before it is taken off, an operation which can usually be done by relays of men in about six hours, as the long hairs come out very easily, leaving the under fur exposed. The fur of the Indian otter is very good, though somewhat inferior in texture to that of the European species. It is in great request with the Tibetans and Bhotiyas, who use it as car lappets for their caps.

Lutra vulgaris, Erx.; *L. monticola,* Hodgs.—Hill otter. Jerdon, 88 : Hodgson, J. A. S., Ben., VIII., 319.

It is not clear whether this otter occurs in the Kumaun Himálaya. It is the common otter of Europe, and, so far as is known, is restricted to the interior of the Himálaya.

Aonyx leptonyx, Hors.; *indigitata, sikimensis,* Hodg.; *Horsfieldii,* Gray—Clawless otter. Jerdon, 89 : Hodgson., *l. c.*, VIII., 319.

This small otter is of an earthy brown or chestnut-brown above and has been procured in the Sárda at Barmdeo, above the junction of the Alaknanda and Pindar near Karnprayág, in the Nandákini above Nandprayág and in the Bhilang. The claws are very minute, and hence its English name. Otters are easily tamed and become very much attached to their owners.

Felidæ.

Felis Tigris, Linn.—Tiger—*Sher, shu, bágh.* Jerdon, 92.

The tiger is found from the Tarái up to 10-11,000 feet and is believed occasionally to cross the passes into Tibet. Those which are found on the outer ranges doubtless migrate to the Bhábar and Tarái, but those found in the interior never leave the hills. They are quite different in appearance, being more bulky, with longer and

more furry hair and shorter and thicker tails. Twenty years ago tigers were very numerous in the Bhábar, the Tarái and the hills, but owing to the extension of cultivation, the increase of population and the greater use of arms of precision, their numbers have considerably diminished. The hill tiger is a quarrelsome animal and often attacks one of its own species that trespasses on its domain. In 1870 a dead tiger was brought into camp that had apparently been killed by another tiger, and about three years ago an officer found a very old male tiger in the Jaunsár hills that had been killed and partially eaten by another tiger. The tiger does not confine itself to animals killed by it in the chase. It has been known to eat the putrid carcase of a buffalo that had died by accident, and in the hills the common bait for the dead-fall trap is a dead sheep or goat. The pairing time is from December to January, when the males may be heard making their peculiar sighing-bellowing noise to attract the females. The females appear to breed every second or third year, producing, generally in the cold weather, from two to five and sometimes six cubs at a birth. It is very rarely, however, that more than three survive, and generally there are only two and often only one. The largest skins have been procured from the Bhágirathi valley and one over 9′9″ from the nose to the tip of the tail in Jaunsár. Several over ten feet have been obtained in the Tarái. Tigers always kill large animals, such as a full-grown buffalo or bullock, by seizing the throat from below; but with smaller animals, such as sheep, deer and man, they usually grip from above and break the neck. It will be useful here to summarise the information that we possess regarding the statistics of deaths from the attacks of wild animals. These, though now some sixty per cent. less than they were thirty years ago, are still sufficiently numerous to place the hill-districts of these provinces at the head of the list both for deaths of human beings from tigers, leopards and bears and for the numbers of these animals destroyed in order to claim the rewards. In the earlier years of British rule Katyúr and Gangoli were almost deserted on account of the presence of numerous "man-eating" tigers. As late as 1848, Mr. Batten, writing of Gangoli, describes Pattis Bel, Athagaon and Kamsyár as excessively jungly and harassed by tigers:—'In some of the tracts near the rivers notorious 'man-eaters' are hardly ever absent and at times the

loss of human life is considerable.' In the Bhábar, as at present, tigers were numerous. Pargana Chandpur and the Pátli Dún in Garhwal[1] as well as the whole of the Tarái district long held an unenviable notoriety as well for the insalubrity of their climate as for the number of tigers that they harboured. In the twenty years between January, 1860, and January, 1880, the records of the Kumaun district show that 692 persons were killed by wild-beasts or snakes, without reckoning those where the cause of death was not ascertained or not reported, which may safely be estimated at one-fourth more. Fifty human lives are thus lost every year in the Kumaun district alone. During the same period, in the same district, 624 tigers, 2,718 leopards, 4,666 bears and 27 wild-dogs were destroyed and rewards were paid for their capture amounting to Rs. 30,812. This return does not give the entire number of these wild animals killed, as in many cases the reward is not claimed or the skin gets spoiled before it can be taken in or the animal perishes in some place where it is not possible to follow it and obtain evidence of its death. From a return of inquests held in Garhwál between 1850 and 1863, the number of deaths from the attacks of wild animals was recorded at 276 during that period, and Rs. 13,784 were paid as rewards for the destruction of 91 tigers, 1,300 leopards and 2,602 bears. Taking the decade 1870-79, the returns show that 211 persons (123 males) were killed by wild animals and Rs. 9,317 were paid as rewards for destroying 62 tigers, 905 leopards and 1,740 bears. A similar series of returns for the Tarái district show that between 1857 and 1869 the mortality from the attacks of wild animals amounted to 54. Between 1871 and 1879, the deaths of 289 persons (157 males) were recorded and Rs. 357 were disbursed in rewards for the destruction of 43 tigers, 43 leopards and 4 bears. In many cases, however, the reward was not claimed, and the returns must be considered as only approximate. The statistics of the Dehra Dún district for the years 1875-79 show the deaths from the attacks of wild animals to be 34, the majority of which were caused by wild elephants. During the same

[1] Mr. Traill writes thus of Nágpur in Garhwál (26th June, 1818):—"While the rest of Kumaun everywhere exhibits an astonishing increase of cultivation, this pargana remains a solitary instance of non-improvement; the causes of this are to be found in the ravages annually committed thereon by tigers, a circumstance which, while it prompts the desertion of existing villages, prevents the occupation of new. The tigers in this province are formidable rather from the nature of the country than from their numbers."

five years Rs. 647 were disbursed on account of the destruction of 30 tigers, 53 leopards, 25 bears and 4 wolves. In the appendix will be found a detailed account of the number of persons killed and animals destroyed in each district for five years. This return is avowedly imperfect, as it only includes the deaths reported to the authorities and the animals killed for which rewards have been claimed.

Felis pardus, Linn.; *leopardus*, Schreb.—Pard, panther, leopard —*Goldár*, *baghera*, *lakar-bágha*. Jerdon, 97.

It is still a matter of discussion whether there are two distinct species of leopards, for it is difficult to believe that the insignificant cat-like, round-headed little animal of from 5′-6′ in length is the same as the powerful, handsome panther measuring 7½′-8′ and almost as bulky as a small tigress. A specimen 7′9″ long took the united efforts of three strong men to place it on an elephant. In the hills, at least, the larger variety does not appear to be slighter in build than the smaller, still there is some ground for the statement that the larger variety is the more slender even there. A specimen procured in the Pátli Dún appeared to be a very different form from that observed in the western Himálaya. It was taller than the ordinary leopard, very slightly built, had a rather long head and was very savage. It is, however, very uncommon. The ordinary leopard, both the large and the small variety, is very common all over the hills and in parts very destructive. The natives kill a great number in dead-fall traps baited with a dead sheep, goat or dog In western Garhwál they use a trap that catches the leopard alive and which is much better in every way, as there is no fear of killing dogs in it, and a live bait is used which is quite safe from the leopard. This trap consists of a narrow passage built with big stones with a rough frame-work of wood at the entrance, in which is fitted a sliding bar to serve as a door. At the other end of the trap is a small space for the kid or puppy ; and this is partitioned off by a stone slab with holes bored in it. The sliding bar is raised and then the trap is set in exactly the same manner as the dead-fall trap. The leopard creeps in to attack the bait, the door falls down behind him, and he is at once secured in such a cramped position that he is unable to exert his strength in trying to get free and remains there until the trapper kills him. The leopard is particularly fond of dogs and has been known to carry

them off in broad daylight from houses in Naini Tál and Almora and in the evening from the public roads in presence of the owners.

Felis Uncia, Sch.; *uncioides*, Hodg.; *Irbis*, Ehr.—Ounce, snow-leopard—*Barhal-hai*. Jerdon, 101.

The snow-leopard is nowhere common to the south of the snowy range, but there are generally one or two on all hills where the blue sheep *(Ovis Nahura)* are found. As a rule they do not frequent the wooded parts of the hills, though a female and two cubs were procured in the forest near Jhála in the Bhágirathi valley. The ounce feeds on the blue-sheep, musk-deer and other animals found near its haunts, and it will kill domestic sheep and goats if it finds the opportunity for catching a stray one. It is a very timid animal and in these hills does not appear to carry off dogs. The fur is of a pale-yellowish ground with dark gray marks all over the body except on the stomach which is pure white. The skin is rare and valuable.

Felis viverrina, Benn.; *viverriceps*, Hodgs.; *celidogaster*, Tem.; *himalayana*, Jerd.—Large tiger-cat—*Jangli-billi*. Jerdon, 103.

A fine specimen of this powerful cat was procured at the foot of the hills in western Garhwál, but it is very rare.

Felis bengalensis, Desm.; *nipalensis* and *pardichrous*, Hodgs.—Leopard cat—*Baghera-billi*. Jerdon, 105.

This very handsome cat is found all over these hills at elevations 6-11,000 feet up to the limits of forest. It does not appear to frequent the lower ranges or the jungles of the submontane tract. Its principal food is rats and mice, but it is also very destructive to young birds of all kinds, particularly to young pheasants. It is a good climber and always seeks a tree when pursued by dogs. The markings seem to vary with the locality and its altitude and differ much in specimens from the same district. It is doubtful whether *F. aurata*, Tem. (*F. moormensis*, Hodgs.), the bay cat (Jerdon, 107), occurs west of the Káli.

Felis Chaus, Guld.; *affinis*, Gray; *Lynchus erythrotis*, Hodgs.; *Chaus lybicus*, Gray—Common jungle-cat—*Ban-billi*—Jerdon, 111,

and Blyth's note on wild types of the domestic cat. J. A. S., Ben., XXV., 439.

This cat is very common in the forests of the submontane tract and in the hills of the lower range up to 6,000 feet. It lives in grass or high crops, such as sugarcane, maize, and the millets, and feeds on rats, mice, birds, and leverets. It produces its young above ground in thick cover and does not frequent caves or holes. It breeds twice a year, producing two or three young at a birth. A kitten of this species grew up to be a very tame and affectionate pet. When first secured it was kept alive by forcing goat's milk down its throat with a spoon and afterwards a few bits of cooked meat were placed on a saucer with the milk, and it would then take a bit of the meat in its mouth and suck the milk through the meat. It never attempted to lap like the young of the domestic cat. There is a black species unnoticed by Jerdon, not uncommon in the forests of the submontane tract below Garhwál. At a distance of 15-20 paces it looks quite black, but on closer inspection its colour is blackish brown with indistinct dark spots, the tips of the hairs being black. It is about the size of the common jungle cat and a true *Felis* in regard to its rounded head, short and strong jaws, cutting teeth, powerful limbs, and retracted claws. Mr. Greig has seen four specimens and is in possession of the skins of two.

Felis Caracal, Sch.; *Caracal melanotis,* Gray—Red lynx—*Siyáh-ghosh.* Jerdon, 113 : Blyth, J. A. S., Ben., XI., 740.

The red lynx has been found in the Dehra Dún and probably exists in the forests below the Garhwál and Kumaun hills, which are of a character similar to those of the Dehra Dún and are only separated from them by the Ganges.

VIVERRIDÆ.

Hyœna striata, Zim.—Hyæna—*Bhagiár, lakar-bágh.* Jerdon, 118.

The hyæna is common in the submontane tract, but it seldom enters these hills. Below the hills it frequents broken, raviny ground where there is plenty of cover, sometimes in forest and sometimes in thorny jungle, and sandy watercourses where there is plenty of long grass. It is a skulking cowardly animal and never shows fight, even when wounded, if it has strength left to crawl away. It is said to be very partial to donkeys and dogs and

will kill domestic sheep and goats if it comes across stray ones, but its principal food is carrion and old bones. It is almost quite nocturnal in its habits, leaving its lair at dusk and returning before break of day. In the Panjáb, it is found in the hills at Sabáthu, Dagshái, and Kasauli.

Viverra Zibetha, Linn. ; *V. orientalis*, *melanurus* and *civettoides*, Hodgs.—Large civet-cat.

This civet yields the drug of that name and is said to occur in the Tarái and hills. See Hodgson's description, Cal. J. N. H., II., 47, 61 ; Jerdon, 120.

Viverra malaccensis, Gmelin ; *V. indica*, Geoff. ; *V. pallida*, Gray ; *V. Rasse*, Horsf.—Lesser civet-cat. Jerdon, 122.

This civet-cat is very common in the scrub jungle all along the submontane tract, but it seldom enters the hills. It is generally found in the thorny thickets of the jujube (*ber*) or in grass jungle or sandy ground where rats are numerous. It has an exceedingly strong scent, and dogs are very fond of hunting it. The civet, though occasionally extracted, is of little value.

Prionodon pardicolor, Hodgson (Cal. J. N. H., II., 57, and Jerdon, 124), the tiger spotted civet, does not appear to occur in Kumaun, though found in Nepál, where it is said to be common.

Paradoxurus Bondar, Gray ; *P. hirsutus*, Hodg.—Tarái tree-cat. Jerdon, 128, Hodgson, As. Res., XIX., 72.

This tree or bear-cat is said to be found throughout the Tarái below the hills extending into Bengal and Behar. There are two other allied species, apparently undescribed, which have been procured by Mr. Greig. Of one he has seen five specimens and describes it as about 40 inches long, the tail being about half that length and very broad at the base : colour, a fine, bright dark grey throughout, with the exception of the feet and ears, which are black. This species is generally found in pairs. It climbs trees well and seems extremely fond of apples and other fruit. It has been procured at Binsar and in Naini Tál and as far west as Kulu. In shape it resembles an otter : hence its vernacular name *ban-úd* (forest-otter) in Kulu and *khar-úd* (grass-otter) in Kumaun. Of the second species Mr. Greig procured a single specimen of a female at Naini Tál which was of a much duller gray ; its tail was shorter and at

the base not more than half the breadth of the tail of the former, and it had altogether a different appearance.

Paguma laniger, Gray; the *Martes laniger* of Hodgson, found in Tibet and the adjoining snowy region of the Himálaya and procured in Nepál; may occur in Kumaun. Jerdon, 129.

Herpestes malaccensis, Cuv.; *H. Nyula*, Hodgs.—Bengal mungoose—*Nyúla*. Jerdon, 134.

This little animal is found in the submontane tract and Dehra Dún and is replaced in the hills by the next.

Herpestes nipalensis, Gray; *H. auro-punctatus*, Hodgs.—Gold-spotted mungoose. Jerdon, 136.

This species is found all over the lower Himálaya from Sikkim to Kashmir and also in the submontane tract.

CANIDÆ.

Canis pallipes, Sykes—Wolf—*Bheriya*. Jerdon, 139.

The wolf is found throughout the submontane tract and in the Dehra Dún, where a reward is given for its destruction. It does not seem to enter the hills.

Canis aureus, Linn.—Jackal—*Gídhar, shiyál*. Jerdon, 142.

Jackals are nowhere more common than in the Tarái and the scrub jungle along the foot of the hills. They ascend the valleys communicating with the plains, but are seldom found above 6-7,000 feet. Their ordinary food is carrion, but they kill a great many young deer and often catch pea-fowl and are very fond of maize. They are very persistent in following a wounded deer, but they rarely venture near it until it is so exhausted as to be obliged to lie down. One seen pursuing a wounded doe antelope was observed to bring her to bay several times, but it never dared to touch her until she fell exhausted by the loss of blood from her wounds. On another occasion two jackals were pursuing a ravine deer, but they never attempted to fix it until it had fallen. Two hounds were, on another occasion, worrying a jackal when suddenly another came up and joined them in tearing the animal to pieces. The dogs did not seem to notice the stranger and he did not appear to be afraid of them. It was not until the master of the dogs showed himself that the jackal left off his task and slunk away, whilst the dogs showed

no desire to follow him. Jackals frequently go mad and are then more dangerous than mad dogs, as they attack all living beings that they meet. Their fur if taken in December-February and properly cured makes excellent carriage rugs. It is very difficult to capture them as they will not enter any description of box trap no matter how skilfully baited, and they are not often caught in dead-fall traps. The gin-trap when skilfully used is alone successful.

Cuon rutilans, Tem.; *C. primævus,* Hodgs.; *C. dukhunensis,* Sykes—Wild-dog—*Bhaunsu; hási* (Tibet). Jerdon, 145.

The wild-dog is found in all parts of the hills between the Tons and the Sárda, and, whether they have increased in numbers or not of late, are now included in the list of animals for whose destruction the State pays a reward. They live chiefly on deer and their favourite prey is the *sámbhar,* which is more easily run down than other deer. They kill a good number of cattle where deer are scarce and appear to hunt by scent just like a pack of hounds. They have very powerful jaws, and when they bring an animal to bay, they continue to spring at its hind quarters and stomach, taking out a mouthful at each bite, until the beast drops from exhaustion, when they go in and soon leave nothing but the bones. A dozen of them have been known to eat up a full-grown *sámbhar* in little more than five minutes. In the valley of the Bhágirathi they are sometimes found close to the snows, hunting the blue-sheep (*barhal*). The wild-dog is of a bright rusty-red colour with black tips to his ears and tail, height about 19 inches, length of body 35 inches and of tail 16 inches. Mr. Greig notes the existence of another wild dog in Kashmír which has apparently not been noticed by Jerdon. He describes it as not so large as the *bhaunsa* and of exactly the same colour as a jackal. As many as twenty hunt together in a pack, uttering a snarling, cackling noise when disturbed. They prey on the ibex and musk-deer and do not disdain to eat carrion, having been seen to feed on the carcase of a bear from which the skin had been taken the previous day. Mr. Wilson has noticed that during the breeding season the wild-dog will drive its prey towards its lair before closing in and killing it, evidently in order to save itself the trouble of conveying the carcase to its young. See Hodson's paper in Cal. J. N. H., II., 205, and Campbell's note on the osteology of

the Canidæ in *Ibid*, 209. Kinloch gives a photograph of a head, p. 17.

Vulpes bengalensis, Shaw.; *Cuonchrysurus*, *xanthurus*, and *rufescens*, Gray; *C. Kokree*, Sykes—Indian fox—*Lomri*. Jerdon, 149; Blyth's note, J. A. S., Ben., XXIII., 279.

This pretty little animal is only found occasionally in the Tarái and low country at the foot of the hills. It does not appear to enter the hills, where it is replaced by the following. It is easily tamed if taken young and makes a faithful, affectionate pet.

Vulpes montanus, Pearson; *V. himalaicus*, Ogilvy—Hill fox—*Kuniya shiyál* (Kumaun); *wámu* (Nepál); *loh* (Kashmír). Jerdon, 152.

This handsome fox is found all over the hills from the Tons to the Sárda, 4-12,000 feet. Its principal food is rats and offal, but it will take poultry when it has the opportunity, and doubtless constantly kills young pheasants and partridges. It is a very poor runner on level ground, and even on open hill sides an ordinary half-bred greyhound can easily catch it. It carries a very fine fur and its skin is in great demand for making rugs.

DELPHINIDÆ.

Platanista gangetica, Lebeck—Gangetic porpoise—*Sús*. Jerdon, 158.

This porpoise is said to have been captured at Hardwár.

SCIURIDÆ.

Sciurus palmarum, Gmelin; *S. penicillatus*, Leach—Common striped squirrel—*Galheri*. Jerdon, 170.

This little squirrel is found throughout the submontane tract and Dúns, ascending the lower valleys to a short distance.

Pteromys petaurista, Pallas: *P. Oral*, Tickell—Brown flying squirrel—*Kartuwa-kiural*. Jerdon, 174; Tickell, Cal., J. N. H., II., *t*. 11.

This curious squirrel is common in all large forests in the hills above 5,000 feet. It feeds on walnuts, hazel-nuts, acorns, and the bark and tender shoots of many trees. It is quite nocturnal in its habits, living in hollow trees during the day and coming out to feed

at dusk. A bonfire in the forest will bring numbers to the neighbouring trees at dusk. Its fur is very good, but the skin is so very fine that it is difficult to cure it without tearing it. It travels about the forest by climbing to a top of a tree and then sailing off downwards in a diagonal direction to another some thirty or forty yards off. It rarely descends to the ground. It is very timid and can easily be tamed.

Pteromys inornatus, Geoff.—White-bellied flying squirrel. Jerdon, 176.

This squirrel occurs in situations similar to the preceding, 6-10,000 feet, and has frequently been procured near Landour and in Kumaun.

Arctomys hemachalanus, Hodg.; *A. Bobac,* Sch.; *A. tibetanus,* Hodgs.—Tibetan marmot. Jerdon, 181.

This marmot is found all along the perpetual snow line in places which are suitable for its burrows. Mr. Greig notes that he has seen marmots in such places that would answer to the description of either Jerdon's Tibetan marmot or his red marmot, sitting side by side and sometimes a black one along with them, so that it is probable Blandford has been right in uniting them. They live at an elevation 12-16,000 feet and emerge from their burrows in May, when the snow melts. Their food consists of roots and vegetables, but it is not known for certain whether they hybernate during the winter or store up a sufficient supply of food to last them for the six months during which they are snowed up. For synonymy see J. A. S. Ben., XII., 410, and XLIV., ii., 122, containing Blanford's review of the genus.

MURIDÆ.

Mus Blythianus, And. *Nesokia indica,* Blyth—Indian mole-rat. Jerdon, 187; Anderson in J. A. S., Ben., XLVII., ii., 227.

This burrowing rodent has been procured in Dehra Dún, where it does considerable damage in the plantations.

Mus Hardwickii, Gray—Short-tailed mole-rat. Jerdon, 190; Anderson, J. A. S., Ben., XLVII., ii., 221.

Occurs doubtfully in the Dún, ascending the lower hills.

Mus decumanus, Pallas—*M. norveyicus,* Buffon. Brown-rat. Jerdon, 195.

Common everywhere in the hills and plains.

Mus plurimammis, Hodg.—Nepál-rat. Jerdon, 196 : Hodgson, Ann. Mag. Nat. Hist., *l. c.*

This species occurs in the Tarái and adjacent plains.

Mus brunneus, Hodg., *M. nemoralis*, Blyth.—Tree-rat. Jerdon, 198, Hodgson ; Ann. Mag. Nat. Hist., XV., 1st Ser., 266.

This rat occurs commonly in houses and near cultivation.

Mus niviventer, Hodg.—White-bellied house rat. Jerdon, 200 ; Hodgson, *l. c.*

Specimens of this rat have been procured from Mussooree and Naini Tál.

Mus oleraceus, Sykes; *M. dumeticola* and *povensis*, Hodgs.—Long-tailed tree-mouse. Jerdon, 202.

This pretty small mouse is commonly found in the thatch and amongst the beams of houses from the hill southwards.

Mus homourus, Hodg.—Hill mouse. Jerdon, 204.

This is the common mouse of hill stations from the Panjáb to Darjíling.

Mus crassipes, Blyth—Large-footed mouse. Jerdon, 204.

Procured from Mussooree.

Mus Tytleri, Blyth—Long-haired mouse. Jerdon, 205.

Specimens of this mouse have been procured from Dehra Dún.

Leggada Jerdoni, Blyth—Himálayan spiny field-mouse. Jerdon, 209.

This species occurs at high elevations throughout the hills. Procured from Darjíling and Kunáor.

Rhizomys Badius, Hodgson.—Bay bambu rat. Jerdon, 214.

This rat is said to have been procured in the upper Pattis of Kumaon. See Hodgson's description, Cal. J. N. H., II., 60.

Arvicola Roylei, Gray.—Himálayan vole. Jerdon, 216.

This vole has been procured at high elevations in Western Garhwál and from Chíni in Kunáor.

HYSTRICIDÆ.

Hystrix Leucura, Sykes; *H. cristata indica,* Gray; *H. zeylanensis,* Blyth—Indian porcupine—*Saki.* Jerdon, 218.

The porcupine commonly occurs throughout the submontane tract and in the hills up to 8,000 feet. In the level country at the foot of the hills it make its own burrows, and when beating with elephants through long grass, the presence of these burrows is felt when the elephant sinks into one up to his chest and gives itself and its rider a troublesome shake. In the hills the porcupine makes its home in natural caves and crevices in the rocks. It is nocturnal in its habits and a great pest to potato-growers, gardeners, and cultivators generally. The best way to kill it is to find its cave and suffocate it by burning wetted straw in the entrance. It may also be taken in the ordinary dead-fall trap (*jiwála*) baited with mango-stones, potatoes or beet-root and the like. If caught in the gin trap, it generally bites off the trapped leg and escapes. It has the power of throwing its quills with great force, but is not able to direct them. In one case a porcupine pursued by terriers raised his quills and expelled a dozen or more with such force that two of them were picked out of a tree close by at more than three feet from the ground. These had pierced through the bark and were tightly fixed in the wood. They frequently injure dogs severely, but the wounds usually heal without festering. Natives are very fond of porcupine's flesh and young ones make excellent curries, and baked in a paste of flour they are very delicately flavoured. For European tastes, however, the adult animal is somewhat rank and coarsely flavoured.

LEPORIDÆ.

Lepus ruficaudatus, Geoff; *L. indicus* and *macrotus,* Hodg.—Common Indian hare—*Kharghosh.* Jerdon, 224 : Hodgson, J. A. S., Ben., IX., 1,183 ; XVI., 572.

The hare occurs throughout the submontane tract and outer ranges up to 7,000 feet and has been procured on Badkot above 8,000 feet. It is doubtful whether *L. hispidus,* Pearson, the hispid hare of the *sál* forests of the Gorakpur submontane tract, extends as far westwards as Kumaon : see Hodgson, *l. c.*

Lagomys Roylei, Ogilvy ; *L. nipalensis*, Hodg. ; *L. Hodgsoni*, Blyth.—Himálayan mouse-hare—*Kang-dúmi* (Kumáon). Jerdon, 226 : Hodgson, J. A. S., Bén , X., 854.

An ordinary observer would not take this tailless rat-like animal for a hare. In appearance it is like a guinea-pig, but much smaller and is very common on all the upper hills at the edge of the forest at 9-16,000 feet.

ELEPHANTIDÆ.

Elephas indicus, Cuv.—Indian elephant—*Háthi*. Jerdon, 229.

At the present time there are about 150 wild elephants in the tract between the Sárda and the Ganges, and about 50 in the Dún and Siwálik tract between the Ganges and the Jumna. They do much damage to the cultivation on the border of the forest, and the number of young trees and bambus destroyed by them is very great. In former years, elephants were caught in pits (*ogi*), but these caused such loss of cattle that the practice was prohibited in 1817. Subsequently it was ordered that all pits should be destroyed and that any elephants found in them should be confiscated and sold on behalf of Government, and any person, in future, digging pits for the purpose of catching elephants should not only be fined, but also be held liable for any loss that ensued.[1] The annual cess levied on the capture of elephants never exceeded one thousand rupees in any year, whilst the grazing dues in the tract between the Rámganga and the Sárda exceeded thirty thousand rupees. The relative value of the two sources of revenue, therefore, offered no inducement to continue permission for the establishment of elephant pits, and the difficulty found in procuring redress for losses caused by cattle falling into the pits led to the strict enforcement of the rule forbidding their excavation. Looked on in another point of view, the pit system of catching elephants was highly uneconomical, as fully three-fourths of the animals captured were either fatally or seriously injured. Accordingly, in 1824, several elephants found in pits were seized and sold, and the proceeds were credited to Government. In 1827, the restriction was removed, and rules were framed for the digging of pits and the collection of dues on

[1] To Board, dated 7-12-18. From Mr. Shore, dated 14-3-27.
„ ditto, 30-5-21. „ Government, „ 19-4-27.
„ ditto, 21-3-27. „ ditto, „ 21-6-27.
„ ditto, 22-5-27.

the capture of elephants, which subsequently received the sanction of Government. But little advantage, however, accrued from this permission to either the persons engaged in catching the elephants or to Government. After the mutiny, for some time, a regular *kheddah* was established at the foot of the hills for the purpose of catching elephants for the public service, but was soon abandoned. By a recent Act of the Legislative Council no one is allowed to kill or capture an elephant without special permission of the local authorities. In 1873, the Maharaja of Balrampur captured thirty head, and in 1879 he secured twenty-eight head. The plan of driving the herds into fenced enclosures is not practised here, where the system is either to run the wild elephants down in the open and lasso them, or to surround them in a gorge by placing fifty or sixty tame elephants in a narrow place where the hills on either side are precipitous and then drive down towards them the wild herd. The men engaged in driving are armed with guns or they beat drums and cymbals and blow horns and keep up a perpetual din. So soon as the wild herd approaches near enough, the tame elephants are rushed at them, and if the ground be favourable and the kheddah be well managed very few, except the large males, escape. The tame elephants have a rope securely fastened around their necks, to which is attached a second rope ending in a running noose. Five or six of them surround and hustle the wild animal until the *phanets* (noose-men) are able to attach at least two of the nooses, when the remainder retire whilst the wild elephant commences the series of struggles that ends in its complete submission. The running noose is then loosened and so tied that it cannot slip and strangle the captive. It is only where there is not much scrub or jungle that the attempt to run down wild elephants in the open ever succeeds. In favourable places the wild animal is captured after a fair chase of about a mile.[1]

Solitary old males are sometimes met with, and are very dangerous to those who have to frequent the haunts affected by them.

[1] An account of elephant shooting and elephant catching in Dehra Dún will be found in Dunlop's 'Hunting in the Himalaya,' London, 1860. From the same work the following vocabulary of the mahauts or elephant-drivers is taken:—'*Mail*' (pronounced, 'mile,') 'get up.' or 'go on:' : '*baith*,' 'sit down:' '*dut*,' 'stop:' '*dut-dut*,' 'go backwards:' '*dug*,' 'step over:' '*lambs dug*,' 'take a long step:' '*turath*:' 'break:' '*beri*' 'let go' or 'stop feeding:' '*chai*,' 'turn' and '*chai-dut*,' 'turn round.' These phrases are in common use by elephant-drivers all over the North-Western Provinces.

In the Dún, where they appear to be more numerous, the pathways made by them may be easily recognized, being on plain land about four feet wide and on hilly ground about half that width, well-marked, and bearing the signs of having been formed by some animal of great weight.

SUIDÆ.

Sus indicus, Sch.—*S. Scropha*, Linn.; *S. vittatus*, Schl.—Wild pig—*Súwar, janaur*. Jerdon, 241.

The wild pig occurs in numbers throughout the tract between the Tons and the Sárda from the plains up to 10,000 feet. In the lower hills they are to be found in every place where there is good cover, and in the upper hills in the oak forests especially. They feed on acorns, wild fruits, and roots, but also do much damage to sugarcane, maize, and rice, when opportunity occurs. Occasionally they eat carrion. An old wild boar is the most fearless of all wild animals. No leopard dare attack him, and he has been known to beat off a tiger; whilst men, and elephants even, are often attacked by him without having given any provocation. As a rule, the largest boars are found far up in the oak forests. See Hodgson in J. A. S., Ben., XVI., 423.

Porculia salvania, Hodgs.—Pigmy hog. Jerdon, 244 : Hodgson, J. A. S., Ben., XVI., 573.

This miniature pig is of a blackish brown colour and seldom weighs more than ten pounds. It occurs in the Tarái and is greatly prized by the Bhuksas and Thárus, but is nowhere very common.

CERVINÆ.

Rucervus Duvaucelii, Cuv.: *elaphoides* and *Bahraiya*, Hodgs.; *euryceros*, K. M.—Swamp deer—*Gond*. Jerdon, 254.

The swamp deer was formerly very plentiful all through the Tarái, but the clearances of the last quarter of a century have reduced its numbers considerably. It is now seldom found west of the Dhabka river except in the eastern Dún of Dehra, and even between that river and the Sárda is nowhere common. It chiefly affects swampy ground well covered with reeds and tall grass, hence the ordinary name; but it is also found at certain seasons in

dry tracts where there are patches of long grass along the edge of the *sál* forests. The stags shed their horns in March, and few are seen with them after the 1st of April. The horns are particularly handsome, carrying from ten to fifteen or more points. See Hodgson's note, J. A. S. Ben. V., 240.

Rusa Aristotelis, Cuv.: *hippelaphus, equinus, Leschenaultii*, Cuv.: *Jarai* and *heterocercus*, Hodgs.: *Saumur*, Ogilby—Sámbhar, sámbar—*Jarau*. Jerdon, 256 : Hodgson, J. A. S. Ben., I., 66, 115.

The sámbhar still exists in nearly all the great forests from the plains up to 10,000 feet, but in very small numbers compared with twenty years ago. It is the finest of the deer tribe, and is much prized by sportsmen for its magnificent horns and the difficulty in obtaining them. Those that permanently frequent the upper hills possess more massive horns and thicker and longer hair, and are more robust in build than those found in the lower hills and the Tarái. In the rains they descend from the lower hills and return when the grass dries up in April. Very few remain permanently in the Tarái. Natives run down a large number every year with dogs, and when snow is on the ground the deer are soon caught, but at other times they generally run a mile or two before being brought to bay. When hard pressed, the sámbhar always runs down the hill and makes for water : the dogs then surround it and keep it at bay until the hunters arrive. The sámbhar affords good sport to a hunter on foot, as it has very keen powers of sight, scent, and smell ; but to the hunter mounted on an elephant it falls an easy prey, being so accustomed to wild elephants as to feel no alarm on the approach of a tame one. Each horn has three tines including the brow antler and two at the top of the beam. The horns are shed during May and the rutting season occurs in October-November.

Axis maculatus, Gray : *major* and *medius*, Hodgs.: *Cervus Axis*, Erx. : *C. nudipalpebra*, Ogilby—Spotted deer—*Chital*. Jerdon, 261.

Hodgson has distinguished two varieties of this species under the names *A. major* and *A. medius*, but this difference requires confirmation. The spotted deer is the most common of all its tribe found in the forest along the foot of the hills. When the jungle is dense it occurs in herds of from ten to twenty, but when the grass

has been burned down it crowds together for mutual protection, and herds numbering several hundreds may be seen. These are very difficult to approach and easily alarmed. The spotted deer is nowhere to be found north of the second range of low hills. The stags shed their horns at irregular times from October until March, chiefly, however, in October-November. The rutting season is equally irregular, since the stags commence to rut so soon as their new horns are perfect. Each horn has three tines, the brow antler and two at the extremity of the beam, like the sámbhar, and frequently 'sports' occur at the base of the brow antler.

Hyelaphus porcinus, Zim.: *Cervus oryzeus*, Kel.: *Dodur*, Royle: *niger*, Bach. Hog-deer—*Pára*. Jerdon, 262.

The hog-deer is found within the same limits as the spotted deer, from the jungles along the foot of the Himálaya to the second range of low hills. It affects grassy swamps or grass jungle along the banks of streams, and only retires into forest when much disturbed. It affords excellent sport for elephant beating, for none but a skilful shot could secure a hog-deer as it dashes across a small opening in the forest when running away. The rutting season occurs October-February, and the horns are shed in March and early April. The horns are like those of a sámbhar in miniature, except that they generally curve in more towards the tip.

Cervulus aureus, Ham.; *C. vaginalis*, Bod.; *C. Ratwa*, Hodgs.; *C. styloceros*, Ogilby; *C. albipes*, Wag.; *C. Muntjac*, Elliot; *C. moschatus*, Blain.; *Muntjacus vaginalis*, Gray. Barking-deer—*Kákar*. Jerdon, 264.

The rib-faced or barking-deer is common throughout the tract between the Tons and the Sárda up to 10,000 feet, wherever there are extensive forests. Its hard bark is constantly heard at all times of the day and night, but being a very poor runner on level ground, it seldom ventures out into the open. It is generally a solitary animal, except during the rutting season, when two or three may be seen feeding together. The upper jaw of the male is armed with two formidable tusks, with which it can inflict very severe wounds. Cases are known in which dogs have been killed or severely wounded by the male *kákar*. Colonel Markham says that "as it runs a curious rattling noise may often be heard like that

from two pieces of loose bone knocked together sharply," but it would appear that this phenomenon is confined to the female. The males shed their horns in May and rut during October-November. The barking deer is quite helpless in the snow, and consequently great numbers are killed every year. The venison is seldom fat, but is very good if hung up for a few days before being cooked.

Moschus moschiferus, Linn. ; *M. saturatus, chrysogaster* and *leucogaster,* Hodgson. Musk-deer—*Kastúra, bena, raus.* Jerdon, 266.

The musk-deer is found in the upper ranges from 8,000 feet to the limits of forest, but it is so much sought after for its valuable perfume-bearing pods that it is now becoming rare all through these hills. The pods and even the dung of this deer smell strongly of musk, though its flesh is not in the least tainted and makes very good venison. The female has no musk. An ordinary pod weighs about two tolas, but sometimes they are twice that weight, and are worth from ten to fifteen rupees per tola. The more common variety of the musk deer is of a brownish grey colour varying in shades on the back where it is darkest. The hair is coarse and very brittle so that it is difficult to obtain a good skin. Musk-deer are nearly always solitary and are only found in the forest, where they prefer rocky, precipitous ground. They are very active and sure-footed, and bound from ledge to ledge with the most graceful facility. Both sexes are destitute of horns, but the males have long slender tusks in the upper jaw (about 3 inches long) that grow downwards and then slightly backwards. The musk-deer is one of the smallest of its family being seldom more than twenty inches high at the shoulder. It is frequently taken in a simple snare by the hill-men, who, for this purpose, make a low hedge along the ridge of a spur sometimes a mile in length or more and just sufficiently high and thick to tempt the game to save themselves the trouble of jumping or flying over. Openings are left in the hedge at intervals of thirty feet in which the snares are set. These are laid flat on the ground, the upper end being attached to a stout sapling bent over so as to form a strong spring. When the musk-deer approaches the hedge, he turns aside until he discovers an opening, through which he walks and puts his foot in the snare. The end of the sapling is thus released and instantly springs up,

suspending the deer by the leg. Many pheasants are captured in these snares in the same manner. See Hodgson's notes, J. A. S., Ben., VIII., 202 : X., 795 : Kinloch gives a photograph of a head, 41.

ANTILOPINÆ.

Portax pictus, Pallas ; *Damalis Risia*, Smith ; *Tragelaphus kippelaphus*, Ogilby. Blue cow—*Nîl-gái*. Jerdon, 272.

The *nîl-gái* is only found in certain patches of forest along the foot of the hills, and usually close to cultivation. It does much damage to young wheat, and no ordinary fence will keep it out. The female has no horns, and gives excellent venison or rather beef.

Tetraceros quadricornis, Blain. : *iodes* and *paccerois*, Hodgs. : *striaticornis*, Leach : *Antilope Chickara*, Hard. : *sub-quadricornutus*, Elliott—Four-horned Antelope—*Chausingha*. Jerdon, 127: Hodgson, Cal. J. N. H., VIII., 88.

This graceful little animal is found throughout the low plateaux and hills covered with *sál* forest and the dry jungle between them and the Tarái. It is generally seen alone or in pairs. It does not seem to suffer from the heat, for except during May-June it never seeks a shady place to lie in, and is usually found in a patch of grass or a *ber* (*Z. Jujuba*) bush, and in the hills it frequents grassy glades in the forest. It is a rather difficult animal to hit as it bounds away. The two pairs of horns are quite separate from each other ; the posterior pair are 4″-5″ long and the anterior pair 1″-2.″ The female has no horns. It rarely carries any fat, and the venison is poor and dry.

Antilope cervicapra, Pallas ; *A. bezoartica*, Ald.—Indian Antelope—*Haran*. Jerdon, 276.

The Indian antelope commonly known as the black-buck occurs only in the tract along the southern boundary bordering on the plains. It is found in open plains or in low grass or light scrub jungle and rarely enters the forest. The horns of those found in this division are small, eighteen inches being rather above than under the average. See on the synonymy, Blanford in J. A. S., Ben., XLIV., ii., 18.

Nemorhœdus bubalina, Hodgson; *Antilope Thar* and *N. procli-vus*, Hodg.—Forest goat—*Tâhr, sarau, aimu.* Jerdon, 284.

The *sarau* is found in most of the rough, rocky hill forests 3,000-9,000 feet. It affects precipitous, densely-wooded places, is solitary in its habits, and is rarely seen in the open except at dusk and daydawn. It is a very fierce animal when brought to bay by wild or tame dogs, and generally succeeds in killing one or two with its short, sharp horns. Its flesh is very caurse, strong, and unpalatable. The horns of both males and females are 9″-10″ long, tapering to a point and curved backwards. The skin is very tough and strong and makes good leather. Although it has an awkward gait, it can cross precipitous ground with great ease and descend slopes with marvellous rapidity. The female produces one kid, generally in March-April. For Hodgson's description see J. A. S., Ben., IV., 489.

Nemorhœdus Goral, Hard.; *Antilope Duvaucelii*, Smith: *A. Ghoral*, Hodgs.—Himálayan chamois—*Gural.* Jerdon, 285.

This pretty animal is found throughout the outer ranges 3,000-9,000 feet. Both sexes have horns; those of the male are 6″-9″ long aned those of the female are 4″-6″ long and considerably thinner. They generally occur in parties of three and four, but where they are abundant herds of ten and twelve are met with. The largest males are usually solitary. They feed up to 9-10 A.M. and again from 2-3 P.M. during the hot weather, but in the cold weather they wander about all day. Chamois shooting is the best possible practice for the young sportsman, enabling him to learn stalking, to walk across steep ground, and to use his rifle satisfactorily. The female produces her young, generally one, though sometimes two, during April-May. A kid, if caught when young, makes a very tame and amusing pet. For Hodgson's description see J. A. S., Ben., IV., 488.

Hemitragus jemlaicus, Smith; *Capra Jharal* and *C. quadri-mammis*, Hodgson—Himálayan wild goat—*Tehr, jula* (male), *jhâral.* Jerdon, 286.

This true wild goat is found in the most precipitous parts of the upper Himálaya, 7,000-12,000 feet, though it also occurs at 6,000 feet in suitable places. Those found at low elevations are called

'*khar-tehr*' by the hill men : they are exactly the same as the others, but do not possess such fine coats nor such long horns. Both sexes have horns, but those of the female are neither so massive nor so long as those of the male. The horns touch at the base and are sub-compressed, sub-triangular and curve backwards considerably. Those of the male measure 10″-15″ along the curve and are 9″-12″ in circumference at the base. The rutting season commences about the second week in October and the young are produced in April-May. The oldest males will be found close up to the snow-line in August-September and the females are often seen above the forest limit. As the snow falls they descend to the valleys, but never leave the precipices except to graze on grassy slopes close by. To enjoy *tehr* shooting a man must be an expert cragsman and must have a very good head. The ground affected by them is always very dangerous, and no one should venture on it without a good guide. For Hodgson's description see J. A. S., Ben., IV., 491.

Ovis Nahura, Hodgson; *O. Nahoor,* Hodg.; *O. Burhel,* Blyth —Blue wild sheep—*Barhal.* Jerdon, 296.

This wild sheep is very plentiful about Níti and Laphkhel, and there are a few at the head of the Pindar river and some are said to occur in the Dárma and other valleys to the eastward. They frequent the grassy slopes and rocky ground between the upper limit of forest and the snow-line 10,000-16,000 feet. The old males leave the females from June until September and live by themselves in parties of three to twelve or more. In October they begin to join the females and in November their rutting season commences. The lambing season occurs in May-June. The old males are very fat in September-October and then yield excellent venison. *Barhal* shooting gives fine sport, but entails hard walking and often very difficult climbing. Both sexes possess horns ; those of the male measure 20″-30″ along the curve and 10″-13″ around the base. The female is a smaller animal than the male, and has small, depressed horns only slightly recurved. The bluish-brown coat of the old males, with its band of jet black on the lower part of the neck and chest and along the flanks and its pure white stomach, makes a very handsome rug. Mr. Wilson notes that the males are seldom seen far from some rocky ground, to which they retire when

alarmed; and that all are accustomed to place sentries on some commanding positions whilst the rest of the flock is feeding. For Hodgson's description see *J. A. S., Ben.*, IV., 492: Lyddeker, *Ibid*, XLIX., ii., 131: Kinloch gives a photograph of the head of a male, 25.

Tibetan fauna.

The wild buffalo and the rhinoceros are no longer found west of the Sárda, and must be definitively excluded from the list of Kumaon mammals. It is now only necessary very briefly to indicate the principal animals of that portion of Tibet adjoining Kumaon and Garhwál. There we have the *chús* or Tibetan antelope (*Kemas Hodgsoni*) on the slopes near lake Mánasarowar and along the head-waters of the Satlaj, and the pretty Tibetan gazelle (*Piocapra picticaudata*), the *gawa* of the Húniyas. But the most conspicuous and most common amongst the larger mammalia is the *Kyang* or wild-ass (*A. Kyang*). It roams all over the country in troops of ten to twenty. Solitary males are, however, met with and frequently bear the marks of the conflict that has led to their expulsion from the drove. Their summer coat is close and shining, above clear antelopine-red; below with the entire limbs and muzzle flavescent-white: mane, tuft of tail and a dorsal line connecting them brown-black. The winter coat is rough like that of a camel and the rufous hue is more pronounced. Almost all writers notice the occurrence in numbers of this animal beyond the passes from British territory into Tibet. The *chánko* or *chángu*, Tibetan wolf (*Canis laniger*) is not uncommon, though from its habits it is seldom seen. It is very fierce and bold, and does considerable damage to the flocks of the Húniyas. Hodgson states that *F. Diardi*, Desm. (Jerdon, 102), the clouded leopard, occurs in Tibet, but it is doubtful. The more common lynx is the *ee* of the Húniyas, the *Felis isabellina* of Blyth, but there is a second smaller cat-like animal, *F. Manul*, Pallas (*F. nigripectus*, Hodgs.). There are several species of badger, a pole-cat, martens, weasels, numerous marmots and leporine animals, a description of which will be found in the works noticed in the 'References' attached to this chapter. The *ban-chaur* or wild yak (*Bos grunniens*, Lin.) is found in the valleys around the head-waters of the Satlaj and in similar localities the *nyán* or *nán* (*Ovis Ammon*, Lin.) is met with, though in no great numbers. Dunlop procured a specimen fo the

yak on the Tibetan side of the snows, in the tract between the Nîti and the Unta-dhúra pass and a specimen of the *nyán* near the same locality. Both these animals are of great size. The tame yak exceeds in bulk the ordinary bullock of the plains, and in the expsessive language of the hill-men, "the liver of a wild yak is a load for a tame one." Dunlop shot one measuring nine feet around the chest, while his horns were sixteen inches in circumference at the base and eleven inches half way up. A specimen of the *nyán* is said to have stood thirteen hands high, but the usual height is 36″-44.″ One measuring 42″ high was 74″ in length : tail with the hair 8″ ; ear 6″ : horns along the curve 40″ and circumference at the base 17.″ A head with horns attached will weigh 40lb., a fair load for a porter in the hills. The *márkhor* (*Capra megaceros*, Hut.), the ibex (*Capra sibirica*, Meyer) and the *uriál* (*Ovis cycloceros*, Hut.) are not found in the Kumaon Himálaya nor in the portion of Tibet between the sources of the Satlaj and those of the Karnáli.

Domestic cattle.

The domestic cattle indigenous to the province are small in size and usually red or black in colour, resembling much the Kerry cow in appearance. Early every morning the village herds are driven to the ridges of the ighbouring hills for pasture, and are again collected before sunset and housed either in the lower story of the dwelling-house or in a temporary shed erected close to the village site. As a rule, the milch cattle are not fed on grain or chaff, but are only pastured, and after the harvest are allowed to eat down the stalks remaining in the fields. During the early winter and summer, when the grass is dry and worthless, the cattle from the lower hills of Kumaon are drive n to the Bhábar for pasturage where they remain from October until May. Whilst there, the inhabitants of neighbouring villages in the hills usually canton together and construct for themselves temporary sheds of boughs of trees with roofs of thatch or leaves. The cattle of the upper hills and of the greater part of Garhwál and westward to the Tons find pasturage all the year round in the upper hills. Neither bullocks nor buffaloes are used for commercial transport, but they share with ponies and women the duty of carrying their owners' baggage in the annual migration to and from the Bhábar. No

Kine.

census of domestic cattle has been taken of late years, but in 1822 a rough estimate gave 241,314 head distributed as follows :—

District.	Cows.	Bullocks.	Buffaloes.	Total.
Kumaun	58,280	36,938	42,959	138,177
Garhwál	66,355	28,546	8,236	103,137

Since then it would be safe to say that the cattle have increased by one-third, giving in round numbers an estimate of 321,000 head for Kumaon and Garhwál, or half a million for the tract between the Tons and Sárda, excluding the Tarái. The cattle in the Tarái temporarily increase in numbers every year by the droves brought up from the plains for pasturage. The average of the returns for the three years 1876-77 to 1878-79 shows that 35,000 head of cows and bullocks and 4,000 head of buffaloes paid the grazing tax each year, to which must be added those which escaped the tax owing to local privileges. The number of the latter may be gathered from the plough statements, allowing two bullocks for each plough and also an average of two cows for each plough, and taking the ploughs at 18,000 we have 72,000 head of cattle belonging to the permanent inhabitants of the Tarái, and adding these to the cattle sent for grazing a total of 111,000 for the whole Tarái or say 600,000 head of cattle for the entire tract with which we are concerned. This is merely an estimate, but it is the nearest that under the circumstances we can arrive at.

The greater part of the supply of bullocks for agricultural purposes is met from the Bhábar, where they are bred in large numbers or are imported from the Oudh districts notably from Nanpára. A pair of light bullocks will cost from Rs. 20 to Rs. 50 and a large pair up to Rs. 80. Several attempts have been made to improve the local breed of agricultural cattle, but all have failed. Bulls imported from Hissár were found to be unable to endure the steamy heat and the troublesome insect torments of the Bhábar and Tarái. The cultivators objected to them that they were too heavy for common purposes, and that it required more care than could be bestowed to bring up the young calves. The foot-and-mouth disease is common and in some years runs through whole tracts of country, destroying great numbers of cattle: during the year 1881 it has

been particularly severe in Kumaun. It is said to be a variety of rinderpest for which no effectual remedy has yet been discovered, though, according to some, the leaves of the common Potentilla dried and powdered and administered internally are said to possess prophylactic properties in these cases. Buffaloes are kept in considerable numbers for milking purposes and manure, and those bred in the Bhábar often attain to an enormous size. There are several local breeds varying in value from 20 to 60 rupees each.

Yak.

In the Bhotiya mahál or villages north of the culminating range of the Himálaya the *chaura-gái* or yak (*Bos grunniens*, Lin.) imported from Tibet and the hybrids between that animal and the kine of the country are used for carrying purposes. When the sire is a yak and the dam a hill cow, the hybrid[1] is called *jubú;* when the parentage is reversed, the produce is called *garjo*. The *jubú* is found more valuable than the other hybrid or than either of the pure stocks. It will carry from two to three maunds and is also used for riding in the snows. It is very sure-footed, hardy and docile and capable of enduring great fatigue. Its price is from 30 to 60 rupees. Both varieties breed freely together and with the pure stock; in the former case the race degenerates, but in the latter the offspring gradually resumes the characteristics of the pure breed. The yak is seldom brought down lower than the summer residence of the Bhotiyas, though the *jubú* goes as far as Rámnagar without appreciable injury. Those used in the local traffic are bred for the most part in Bisahr.

Sheep and goats.

The sheep and goats used by the Bhotiyas for carrying purposes are not bred by them, but are purchased in the villages of the Dánpur and Badhángarh parganas or are imported from the Chamba district of the Panjáb Himálaya. The latter is the usual course, and in order to keep the trade in their own hands, the importers bring only ewes. Traill's description still holds good:—"The pasture on the upper ranges of the Himálaya are found to yield a grass in a peculiar degree nutritive to sheep. On the melting of the winter snows, towards the end of March, these mountains which, though lofty, are by no means precipitous, become covered with verdure, and are then

[1] In Tibetan dzhobu.

resorted to by the flocks of the neighbourhood. A few days are said to suffice to restore the animals to condition, though ever so much reduced by the fasts and rigors of the preceding winter. The grass of these pastures is distinguished by the shepherds under a particular name, and has the universal reputation of being inexhaustible, the growth during the night being said to compensate fully for the consumption of the day. The flocks continue here till the commencement of the rains, when they are driven to less rich pastures on the more southern ridges ; with the setting in of winter, they return to the villages. During this season, the sheep are compelled to browse with the goats; branches, chiefly of the oak, being cut down for them, and hay, though stored in small quantities for cattle, is never given to sheep. In some parts of Garhwál the leaves of trees, particularly of the mulberry, are dried and stocked in autumn, to serve as fodder for the winter. The *kimu* or mulberry is there, consequently, much valued, and the property in its foliage forms an object of sale and purchase distinct from the land. While on the mountains, the flocks are secured during the night in folds ; these are situated along the ridges, and being intended for annual resort, are substantially built with layers of dry stone: the wall is raised to nine or ten feet, so as to exclude beasts of prey: only a single door of entrance is left, and that of the smallest dimensions, with the same view, as the leopards, when the door is high, break it down without difficulty by leaping against it. In the interior, sloping *chhappars* are erected along one or more sides, according to the number of animals to be sheltered. Every village has commonly its separate fold at each of the periodical pastures ; the ridges in question, consequently, exhibit the appearance of a chain of fortified posts, the resemblance being increased by the individual sites of these erections, which, with a view to facility of draining, are placed on the summits of rising grounds."

The hill sheep are small with wiry brownish-grey wool, short tails and large horns. They are not good for the table and are kept for the sake of the wool, out of which coarse blankets are made. Attempts have been made to improve the breed by the importation of Tibetan, English and Australian rams, but hitherto the results are imperceptible. The common diseases of sheep, such as rot, mange, small-pox, &c. are all here prevalent and, in some years, extremely

destructive; the goats are further liable, in wet weather, to a disease called *khari*, which frequently terminates in the loss of the hoofs. The casualties are further augmented by exposure and fatigue, by accidents, and by wild beasts; and as the females—even those with young at their feet—are not exempted from labor, it can be a matter of no surprise that the Bhotiya annually finds himself called on to make a fresh outlay for keeping up his stock. The common description of sheep carries from ten to sixteen pounds and is worth about three rupees. The Tibetan sheep are also employed by the Bhotiyas in their carrying trade and are taller, stronger and more active than the Kumaon breed. They carry from thirty to forty pounds, but being unable to bear the heat of the Cis-Himálayan tract are usually kept by their owners at some adjoining village in Tibet and are brought into use when the passes open. The regular day's journey is about five miles in consequence of the great time required for pasture which is their only subsistence.

Goats both those bred in Kumaon and those imported from Tibet are also used in the carrying trade. They bear burdens of from twelve to twenty-four pounds and are worth four to five rupees. They are usually chosen from their superior boldness and activity as leaders of the flock and are furnished with bells. It is chiefly by means of these goats and sheep that the salt and borax of Tibet are brought to the lowland markets and there exchanged for the commodities of the plains. The salt and borax are carried in a sort of pack made of worsted with a pair of pockets called *karbaj* (*phancha* in Garhwál) slung across the animal's back. These pockets are partly covered with leather to protect the contents from moisture when travelling or when piled on the ground in camp. The pack is girthed underneath the body and a band around the chest and another crupper-wise under the tail render it perfectly safe when moving up or down hill. It is marvellous to observe the business-like way in which these little beasts of burden carry their loads. Coming upon them on the very narrowest, steepest and most slippy ascent or on the brink of a precipice, they seem intent only on pursuing their way, not turning aside for anything or any one, their obstinacy often causing the traveller uneasiness and always teaching him patience. And not the less curious is to observe

flocks of them numbering many hundreds meeting in a narrow path, each going the contrary way and yet none make a mistake, but persist in following their own leader and patiently overcome all obstacles in doing so. Goats are sometimes imported from Tibet for food or sacrifice, but their flesh is very strong and ill-flavoured. The indigenous breed is raised in the same places and by the same people who keep the indigenous sheep. Goats are, as a rule, low sized and stoutly made, although those bred in the more northern pattis often attain fair proportions. They are subject to the same diseases as sheep and are frequently poisoned by eating the rank herbage that springs up in the rains. The leaves of the *ayár* (*Andromeda ovalifolia*) so common about Naini Tál are also said to be fatal to goats. The hill-goat is useless for milk-giving purposes and is bred chiefly for the carrying trade or for food and sacrifice. Large flocks of sheep and goats arrive in the Tarái from the plains about the end of October for pasture. They consist for the most part of ewes, and as soon as the lambs are sufficiently strong, they are again taken to the plains. The sheep brought for the supply of the Mussooree and Naini Tál markets usually come from the Kangra and Kulu districts of the Panjáb Himálaya, though the districts of the middle Duáb also supply a large number, smaller in size, but, when fed on gram for some time, yielding excellent mutton.

Shawl-wool.

From the earliest years of British rule much attention has been paid to collecting information regarding the *pushm* or shawl-wool trade with Tibet, but with little practical result. The papers by Raper and Moorcroft in the earlier records and that drawn up by Captain E. Smyth in 1853 are now obsolete, but still present some features of interest. *Pushm* is procurable at all the Tibetan marts at from ten to twelve annas per pound, to which has to be added the cost of carriage. There are two sorts, the black and white ; the latter being more valuable and more common than the former. The *pushm* of the yak is also produced in large quantities, but is much coarser than goat *pushm*. It is not much sought after for export and is consumed on the spot for making ropes, cloth for tents and coarse blankets for wear. Rúduk and Gartok are the principal marts for the sale of shawl-wool, which is procurable also at Taklakhár, Chapráng, Gángri and from Haurba, Chhyúlithol Banbuwáthol,

Dábáling and Magana. The export trade is principally confined to Ladák and Káshmír. The goat-shearing season commences about the beginning of June and the hair is not separated from the *pushm* or under-wool by the Huniyas, but is sold as sheared and is subsequently sorted by the purchasers. For some years all the wool produced to the north of Gartok and also that from the districts to the east and south has, by order of the Chinese authorities, been concentrated there and sold only to Ladáki and Káshmíri merchants or their agents. Still the Kumaoni traders have always been able to smuggle some shawl-wool into Kumaon, but the demand is so restricted and the market for this class of wool having been already well established at Rámpur in Bisahr, the quantity has never been considerable. The Kumaoni traders are also put to some disadvantage by the lateness of the season at which the passes are open. The road from Kunáor to Tibet along the valley of the Satlaj by which much of the *pushm* is imported opens very early and the traders have time to push up to Taklakhár to the east of the Byáns pass before our Bhotiyas have begun to cross their passes. Of late years a trade in wool, both raw and manufactured, has sprung up, but is subject to many vicissitudes. The imports through the passes into British territory have been as follows :—

Year.	*Raw wool.* Maunds.	*Blankets.* Maunds.	*Value.* Rs.
1877-78 ...	6,225	1,072	1,09,845
1878-79 ...	2,049	255	54,142
1879-80 ...	2,373	311	51,275

This trade is almost entirely in sheep's wool and can hardly be considered well-established. The Huniyas bring their earliest ventures to Milam and have their sheep sheared there, selling the produce to our Bhotiyas. A certain small amount is also brought by the Bhotiyas from Gartok, but only, so it appears, sufficient to give them and their women employment in the manufacture of the thick woollen blankets known as *thalmas* and *chaptas* and the coarse gowns known as *chaugas* or *bakus*.[1] These are distinguished from the local woollen manufactures by their having the wool on one side combed up so as to resemble a fleece. A Bhotiya is hardly ever to be seen without a string of this wool spinning by the simple means of a leaden weight and the torsion given by his fingers. The women

[1] Fuller in Rep., 1878-79.

weave the thread into blankets, which sell at Bágeswar fair at from five to eight rupees each. The Tibetan wool can be delivered at Bágeswar at about twenty rupees for 82lb. The coarser wool of the Bhotiya sheep is known as *bagiáli* and is entirely consumed locally for local wants. There does not seem to be much prospect of any important trade arising in wool with Tibet. The *pushm* is limited in supply and fetches uncleaned from Rs. 60 to Rs. 70 per 82lb. at Bágeswar, and the trade is still practically a monopoly in the hands of the agents of the Káshmír and Ludhiána manufacturers. The supply of sheep's wool from all this portion of Tibet can hardly exceed 15,000 maunds or 550 tons, quite insufficient to establish a special industry and the supply from the carrying sheep is consumed locally. Those who are interested in the question of the wool-trade with Tibet will find some accurate information on the subject in the annual reports of the Department of Commerce.

The Tibetan or hill pony is imported from Tibet by the Bhotiyas and is generally known under the name *gúnt*. Those brought from the Chhamurti district are held in high repute and fetch very high prices. The price of the ordinary *gúnt* ranges from Rs. 150 to Rs. 300. They are clumsy, rough and small, but sagacious, strong, active, very sure-footed and docile. The pony in more common use amongst the hill people is the *banjára* variety, bred in large numbers along the foot of the hills. It is a very hardy, useful small sized animal and does most of the carrying work between the plains and the hill sanitaria. It is worth from twenty to forty rupees. Grass, gram, barley-meal, *urd* and *bhat* are used as fodder for ponies, and the last is the only grain procurable for them in the upper pattis.

There are two varieties of the domestic dog—the Tibetan mastiff, which is large, strong with a shaggy coat, very fierce and well adapted to defend the flocks of its owner from beasts of prey and robbers; and the hill variety of the common pariah dog of the plains. The former will not stand well the heat of the plains and owing to its fierce disposition is an undesirable pet; the latter is a finer and more handsome animal than his brother of the plains and becomes an attached and faithful companion. Both are much subject to hydrophobia, and few years pass without its occurrence being brought to notice unpleasantly. I have heard of Tibetan terriers, but have never seen them.

References.

The following references are chiefly to the reports and works of local observers which contain much local information that has never been made use of in the systematic works. Hodgson and Blyth among the older and Blanford, Stoliczka and Dobson amongst later writers have done much for the Indian mammalia :—

Jerdon.—Indian Mammals. Calcutta, 1867.

Gray.—Illustrations of Indian Zoology. London, 1833-34.

Royle.—Illustrations of the Botany and other branches of the Natural History of the Himálayan mountains (the mammalogy by W. Ogilby). London, 1839.

Vander Hoevon.—Handbook of Zoology, edition Clark. London, 1858. Catalogue of specimens and drawings of the Mammalia and Birds of Nepál and Tibet in the British Museum, 1846.

To the sportsman I commend the following works :—

Markham, F.—Shooting in the Himálayas. London, 1854.

Rice, W.—Tiger-shooting in India. London, 1857.

Shakespear, H.—Wild sports of India. London, 1861.

Dunlop, R. H.—Hunting in the Himalayas. London, 1860.

Kinloch, A.—Large game shooting in Tibet and North-West. London, 1869.

Baldwin, J. H.—Large and small game of Bengal and the North-Western Provinces. London, 1876.

HODGSON'S PAPERS.

Nepál Mammals. Col. J. N. H., II., 212, 413 : IV., 285 : J. A. S., Ben. I., 335 : II., 101 : V., 231 : X., 907.

A new genus of the carnivora (*M. indica*). As. Res. XIX., 60 : J. A. S., Ben., V., 671.

Note on Zoological nomenclature. J. A. S. Ben., V., 751.

Classical terminology of Natural History. *Ibid*, X., 26.

Three new species of monkey. *Ibid.*, IX., 1211 (*P. schistaceus, &c.*)

A new species of *Plecotus*. *Ibid.*, XVI., 894 (*P. auritus*).

On *Megaderma schistacea*. *Ibid.*, XVI., 889 : XI., 225 (*M. Lyra*).

Synopsis of the Vespertilionidæ of Nepál. *Ibid.*, VI., 699.

Description of the *Káthiah nyúla*. *Ibid.*, IV., 702 (*Mustela Kathiah*).

Rhizomys Badius. Cal. J. N. H. II., 60 410. (Jerdon, 214).

Two new species of flying squirrel. J. A. S. Ben. XIII., 67 (Jerdon, 177 178).

A Rhinolophus from central Nepál. *Ibid.*, XII., 409. (Jerdon, 23).

On the rats, mice and shrews of the central region of Nepál. An. Mag. N. H., 1st Ser., XV., 266.

A new genus of Plantigrades. J. A. S. Ben. VI., 560 (Jerdon, 138).

Four new species of otter. *Ibid.*, VIII., 319 (Jerdon, 86).

A new species of porcupine. *Ibid.*, XVI., 771 (Jerdon, 221).

A new mole, *Talpa macrura*. *Ibid.*, XXVII, 176 (Jerdon, 51).

On the various species of Caninæ. Cal. J. N. H. II., 205, 412.

On the civet of India. *Ibid*, II, 47 (*V. Zibetha*).

A new species of Paradoxurus. As. Res. XIX., i., 72 (*P. Bondar*).

The marmot of the Himálaya. J. A. S. Ben., X., 777: XII., 409 (Jerdon, 181).

Lagomys nepalensis. *Ibid.*, X., 854 (*L Roylei*).

The hispid hare of the *sál* forest. *Ibid.*, XVI., 572 (*Lepus hispidus*).

The common hare of the plains and Sub-Himálaya. *Ibid.*, IX., 1183 (*L. rufi-caudatus*).

A new form of hog. *Ibid.*. XVI., 423 (Jerdon, 241).

The pigmy hog of the Tarái. *Ibid.*, XVI., 593 (Jerdon, 244).

Anatomy of *Ailurus*, *Porcula* and *Styloceros*. *Ibid.*, XVII., ii., 475, 573.

On a new species of *Cervus*, IV., 648: XII., 897.

Cervus Elaphus of the *sál* forests. X, 721 (Jerdon, 251).

Cervus Duvaucellii. V., 240 (Jerdon, 254).

On the genus *Moschus*. VIII., 202, X., 795 (Jerdon, 266),

On the *Shou* or Tibetan stag. XIX., 466, 578: XX., 388 (Jerdon, 251).

The Jarai. I., 66, 115 (Jerdon, 256).

On the *Bibos, Gauri gau* of the Indian forests. VI., 745: X, 449.

On a new Tibetan antelope. XV., 334.

On the Cheru antelope. III., 134.

On various genera of Ruminants. XVI., 685.

Antilope Hodgsoni. I., 59.

Synopsis of the *Thár* and *Ghoral* antelopes. IV., 487 (Jerdon, 284-5).

The wild goat and wild sheep of the Himálaya. IV., 490, 710: V., 254: X., 230: XII, 447: XVI., 490, 1003.

Gray.—On the double-horned Asiatic Rhinoceros An Mag. N. H. 4th Ser., X., 207: XII., 252 (Sclater in *Ibid.*, X., 298). On the smaller spotted cats of Asia. *Ibid.*, XIII., 62: XIV., 377. On *Paradoxurus*, *Platyschista* and *Paguma*. *Ibid.*, XIV., 241. List of the species of Feline animals. *Ibid.*, XIV., 351.

Cope, E. D.—On the genera of Felidæ and Caninæ. *Ibid.*, 5th Ser., V., 36, 92.

BLYTH'S PAPERS.

Catalogue of the Mammalia in the Museum of the Asiatic Society. Calcutta, 1863.

On the different species of Orang-utan. J. A. S. Ben., XXII., 369: XXIII., 210: XXIV., 518.

Notes of various Mammalia with descriptions of many new species. *Ibid.*, XIII., 463.

The Mammals and birds of Burmah. *Ibid.*, XLIV., Extra.

Zoological collection from Chera Punji. *Ibid.*, XX., 517.

Mammalia and birds of Ceylon. *Ibid.*, XX, 153.

On the fauna of the Nicobar Islands. *Ibid*, XV. 367.

The bat, *Taphozous longimanus*. *Ibid.*, XI., 784.

Three species of bat of the genus *Taphozous*. *Ibid.*, X., 971.

On the genus *Megaderma*. *Ibid.*, XI., 255.

Memoir on the rats and mice of India. *Ibid.*, XXXII., 327: XXXIV., 192.

A memoir on the Indian shrews. *Ibid.*, XXIV., 24.

A new species of mole (*Talpa leucura*).

The *Sciuri* of Ceylon and Tenasserim. *Ibid.*, XVIII., 600 : XVI., 863: XXIV., 469 : XXVIII., 271 (note) : XXXI., 331.

A monograph of the species of Lynx. *Ibid.*, XI., 740.

A new species of Lagomys from the Himálaya. *Ibid.*, X., 816.

Description of *Caprolagus*, a new genus of Leporine mammalia. *Ibid.*, XIV., 247.

On the *Cetacea* of the Indian Ocean. *Ibid.*, XXVIII., 481.

General review of the species of true stag or elaphoid form of *Cervus*. *Ibid.*, X., 736 : XXX., 185.

Monograph of the species of wild sheep. *Ibid.*, X., 858 : XVI., 350.

On the different animals known as wild asses. *Ibid.*, XXVIII., 229 : XXXI., 363.

On the flat-horned Taurine animals of south-eastern Asia. *Ibid.*, XXIX., 282.

On the living Asiatic species of *Rhinoceros* and *Elephas*. *Ibid.*, XXXI., 151, 196.

On the Zoology of the Andamans. *Ibis*, I., 464.

Critical remarks on J. E Gray's Catalogue of the Hodgson collections. An. Mag. N. H., 1st Ser., XX., 313 : 2nd Ser., I., 454.

On the *Bos* (?) *pegasus* of the late Col. Smith. *Ibid.*, 4th Ser., VIII., 204.

On the Asiatic two-horned rhinoceros. *Ibid.*, X, 399.

On *Rhinoceros Crossii*. Gray., P. Z. S. 1861.

Synoptical list of the species of Felis. *Ibid.*, 1863.

Notes on certain Mammals (Civets, &c). *Ibid.*, 1864.

Notes on three Asiatic deer. *Ibid.*, 1867.

Notes on two species of Antelope. *Ibid.*, 1869.

DOBSON'S PAPERS ON BATS.

A new species of Vespertilio by G. E. Dobson. J. A S. Ben. XL, ii., 186.

Four new species of bats. *Ibid.*, XL., ii, 260.

On various species of bats. *Ibid.*, XL., ii., 455.

On the osteology of *Triænops persicus*. *Ibid.*, XLI., ii, 136.

On the osteology of some species of bats. *Ibid.*, XLI., ii., 334.

On five new species of Rhinolophine bats. *Ibid.*, 336.

On the *Pteropidæ* of India. *Ibid.*, XLII, ii., 194.

On a new species of Vespertilio. *Ibid.*, 205.

On the Asiatic species of *Molossi*. *Ibid.*, XLIII., ii., 142.

List of Chiroptera from the Khasia hills. *Ibid.*, XLIII., ii., 234.

New species of Chiroptera. *Ibid.*, 237.

On a collection of Chiroptera from India and Burma with descriptions of new species. *Ibid.*, XLVI, ii, 310.

Monograph of the Asiatic Chiroptera and catalogue of the species of bats in the Indian Museum, Calcutta. London, 1876.

Conspectus of the sub-orders, families and genera of Chiroptera by the same. An. Mag., N. H., 4th Ser., XVI., 345: XVIII. 345.

Lydekker, R.—On the dentition of *Felis tigris*. J. A. S. Ben, XLVII., ii., 4. On the dentition of *Rhinoceros*. *Ibid.*, XLIX., ii., 135.

Tytler.—A new species of Paradoxurus. *Ibid.*, XXXIII, 188.

Tickell.—Note on the Gibbon. *Ibid.*, XXXIII., 196.

Blanford, W.—Zoological notes. *Ibid.*, XXXVI., ii., *189: XL., ii, 367: XLI.*, ii, 152. Notes on the Zoology of Sikkim. *Ibid.*, XL., ii., *367: XLI., ii., 30*, 152. On *Golunda Elliotti* from Sind. *Ibid.*, *XLV*, ii., *165: XLVI., ii., 288.* On some mammals from Tenasserim. *Ibid., XLVII., ii., 150.*

On a new hedgehog (*E. niger*). *Ibid.*, XLVII., ii., *212. Description of an Arvicola* from the Panjab Himálaya. *Ibid.*, XLIX.. ii., 244. The African element in the Indian fauna. An. Mag. N. H., 4th Ser., XVIII., 277.

Anderson, J.—Description of some new and little known Asiatic shrews. J. A. S., Ben., XLVI., ii., 261. On the Indian species of the genus *Erinaceus*. *Ibid.*, XLVII., ii., 195. On the species of *Nesoka* and *A. indica*. *Ibid.*, XLVII., ii., 214. On some new Asiatic mammals and *Chelonia*. An. Mag. N. H., 4th Ser., XVI., 282.

Tibetan Fauna.

Hodgson, B. H.—The mammals of Tibet. J. A. S. Ben., XI., 275. The Tibetan badger. *Ibid.*, XVI., 763. The pole-cat of Tibet. *Ibid*, XVIII., 446. A new Tibetan antelope. *Ibid.*, XV., 334. Tibetan and Himálayan marmots. *Ibid.*, XII., 409. New species: *Lagomys Curzoniæ* and *Mustela Temon*. *Ibid.*, XXVI. 207. (Note on the former by F. Stoliczka. *Ibid.*, XXXIV., ii., 108; but see Blanford in *Ibid.*, XLIV., ii, 110.) On the wild ass and wolf of Tibet by the same. Cal. J. N. H., VII., 469.

Blyth, E.—On the different animals known as wild asses. J. A S. Ben., XXVIII, 229: XXXI, 363. A monograph of the species of wild sheep. *Ibid.*, X., 858: XVI., 350.

Hume, A. O.—On a supposed new sheep. *Ibid.*, XLVI, ii., 327.

Gunther, A.—Description of some Leporine mammals from Central Asia. An. Mag. N. H., 4th Ser., XVI. 228.

Severtzoff, H.—Mammals of Turkestán. *Ibid.*, XVIII., 40, 130, 168, 208, 325, 377.

Blanford, W.—On the scientific names of *Capra ægagrus*, the *Pásang* or Persian wild goat and of *Capra Falconeri*, the *Márkhor*. J. A. S. Ben., XLIV., ii., 12. List of Mammalia collected by Dr. Stoliczka with the Yarkand mission. *Ibid.*, XLIV., ii., 105. On the species of Marmot inhabiting the Himálaya, Tibet and the adjoining regions. *Ibid.*, XLIV., ii., 114. Note on a large hare inhabiting high elevations in western Tibet. *Ibid.*, XLIV., ii., 214. On *Felis Shawiana*, a new Lyncine cat from Eastern Turkistan. *Ibid.*, XLV., ii., 49. An undescribed weasel from Yarkand. *Ibid.*, XLVI., ii., 259. On two Asiatic bears, the *Máwh* of Bilúchistán and *U. pruinosus* of Tibet. *Ibid.*, XLVI., ii., 345. On an apparently new hare and other mammalia from Gilgit. *Ibid.*, XLVI., ii., 323: XLVIII., ii., 95. On new mammalia from Persia and Biluchistán. An. Mag. N. H., 4th Ser., XVI., 309.

Lyddeker, R.—Notes on the Mammalian fauna of the Wadwán and upper Chináb valleys. J. A. S. Ben., XLVI., ii., 283. On the occurrence of the musk-deer in Tibet. *Ibid.*, XLIX., ii., 4. Note on some Ladák mammals. *Ibid.*, 6. On the zoological position of the Barhal or blue sheep *Ibid.*, 131.

Drooks, W. E.—On the ornithology of Káshmír. J. A. S. Ben., XLI., ii., 73,327.

Blanford, W.—List of Reptilia and Amphibia collected by Dr. Stoliczka in Káshmír, Ladák and E. Turkestán. J. A. S. Ben, XLIV., ii., 191. On the genus *Gymnops*. XLII., ii., 144.

BIRDS.[1]

Birds.

THE hill districts of the North-Western Provinces are about equally distant from the Brahmaputra on the one hand and the Indus on the other, and occupy the central portion of the Himálayan range proper. The birds of the Eastern Himálaya approximate to the Indo-Malayan forms in the lower hills; and in Nepál, especially to the north, the fauna is characterised by many peculiar and striking forms, but few of which are as yet known to cross the Káli into Kumaun. In the Western Himálaya, the fauna approaches to that of the western palæarctic region, and stragglers from among some of the more typical forms find their way as far as Garhwál. On the north the mountain-haunting species of the Eastern palæarctic region are found, while to the south is the Indian region proper, with its fairly distinctive fauna. The commoner birds of this tract are those which are found throughout the Himálayan range, but situated as it is, many stragglers from the surrounding regions are found among the rarer birds. On the west such species as *Coracias garrula*, *Calacanthis burtoni*, and others, extend into Garhwál; on the north stragglers from Tibet, such as *Corvus tibetanus*, *Syrrhaptes tibetanus*, *Perdix hodgsoniæ*, &c., are occasionally met with; on the east, Nepálese forms, such as *Palæornis javanicus*, *Oriolus traillii*, *Cissa sinensis*, *Henicurus schistaceus*, *Yuhina occipitalis*, &c., are found in Kumaun. Stragglers from the lower Bengal and Indo-Malayan forms, such as *Eurystomus orientalis*, *Psarisomus dalhousiæ*, &c., are found in the lower hills and sub-Himálayan tracts; while many of the species inhabiting the plains of Northern India extend into the Dúns and outer ranges.

[1] This list of the birds found in the Himálaya between the Káli and the Tons has been kindly prepared by Captain G. Marshall, R.E.

But little has as yet been recorded of natural history researches in this tract, and further observations would probably greatly extend the list of birds now given. Probably some fifty more of the eastern forms among the vultures, eagles, owls, kingfishers, hornbills, piculets, barbets, cuckoos, sunbirds, treecreepers, woodshrikes, minivets, flycatchers, wrens, shortwings, ant thrushes, timaline birds, bulbuls, chats, warblers, pipits, hilltits, &c., will be found to extend into Kumaun. In the Dûns *Megalurus palustris*, *Chœtornis striatus*, several *Locustellas*, *Burnesia gracilis*, *Acridotheris ginginianus*, *Porzana maruetta*; *Rallus striatus* and *Rallus indicus* may almost certainly be found, though their occurrence has not as yet been recorded. Similarly, on the northern limits, *Grandala cœlicolor*; *Accentor altaicus*, *A. strophiatus*, *A. rubeculoides*; *Pica bottanensis*, *Pyrrhocorax alpinus*; and *Tetraogallus tibetanus*, though not yet recorded, will probably be found; several species of *Dumeticola* and *Proparus vinipectus* have been found both east and west of this tract, but not as yet within its limits. A large number of the birds included in this list among the harriers, reedwarblers, rubythroats, warblers, willow-wrens, wagtails, pipits, pigeons, quail, snipe, sandpipers, and others, are regular migrants, to be found in spring and autumn, and probably other birds of these classes will be found from time to time; and many of the permanent residents, which pass the summer in the higher ranges, are found in winter in the glens and warm valleys.

AVES.

(NOTE.—*The numbers prefixed are those of Jerdon's "Birds of India"; for birds not included in Jerdon's book the number of the most nearly allied species is given, with the addition of "bis," "ter," &c., as the case may be. The references in brackets following the English name are to detailed descriptions of the species*).

1. Vultur monachus, the great brown vulture (Jerdon I., 6). 5,000 to 10,000 feet; rare.
2. Otogyps calvus, the black king vulture (Jerdon I., 7). Common up to about 3,000 feet.
3. (*ter*). Gyps himalayensis, the griffon vulture (S. F. VII., 323). From 4,000 to 10,000 feet; common.
4. Gyps indicus, the long-billed vulture (S. F. VII., 165). In the Dûns and sub-Himálayan tracts.
5. Gyps bengalensis, the white-backed vulture (Jerdon I., 10) Common up to about 5,000 feet.

6. Neophron ginginianus, the white scavenger vulture (Jerdon I. 12). Common up to 5,000 feet.
7. Gypaetus barbatus, the Lammergeyer, or bearded vulture. (Jerdon I, 13). 5,000 to 10,000 feet.
8. Falco peregrinus, the peregrine falcon (Jerdon I., 21). In the Dún, rare; a cold weather migrant.
9. Falco peregrinator, the sháhín falcon (Jerdon I., 25). From 3,000 to 10,000 feet; a permanent resident.
11. Falco jugger, the lagger falcon (Jerdon I., 30). The Dún, Kumaun, at low elevations; rare.
13. Falco subbuteo, the hobby (Jerdon I., 33). A cold-weather visitant; rare at all elevations.
14. Falco severus, the Indian hobby (Jerdon I., 34) Kumaun and East Garhwál; at low elevations; rare.
16. Falco chiquera; the red-headed merlin (Jerdon I., 36). The Dún and warm valleys; not uncommon.
17. Cerchneis tinnunculus, the kestril (Jerdon I., 38). Common at all elevations in winter; breeds at 5,000 feet.
19. (*bis*) Cerchneis amurensis, the eastern red-footed kestril (S. F. II., 527). Rare.
20. Microhierax cœrulescens, the white-naped pigmy falcon (Jerdon I., 42). Kumaun; 4,000 feet. Rare.
21. Astur palumbarius, the goshawk (Jerdon I., 45). 9,000 to 15,000 feet permanent resident.
23. Astur badius, the shikra (Jerdon I., 48). Not uncommon at low elevations.
24 Accipiter nisus, the sparrowhawk (Jerdon I., 51). Common at all elevations; breeds at 5,000 to 10,000.
25. Accipiter virgatus, the Besra sparrowhawk (Jerdon I., 52). Rare.
26. Aquila chrysaetos, the golden eagle (Jerdon I., 55). Rare; at great elevations near the snows.
27. Aquila mogilnik, the imperial eagle (S. F. I., 290). The Dún in the cold weather; rare.
28. Aquila clanga, the spotted eagle (Jerdon I., 59). The Dún; permanent resident; not uncommon.
29. Aquila vindhyana, the Indian tawny eagle (Jerdon I., 60). The Dún; permanent resident; not uncommon.
30. Aquila hastata, the long-legged eagle (Jerdon I., 62). The Dún; permanent resident; not uncommon.
31. Hieraetus pennatus, the booted eagle (Jerdon I., 63). In the Dún and warm valleys; very rare.
32. Neopus malaiensis, the black eagle (Jerdon I., 65). 5,000 to 10,000 feet; rare.
33. Nisaetus fasciatus, Bonelli's eagle (Jerdon I, 67). At all elevations, but rare.
34. Limnaetus caligatus, the changeable hawk-eagle (Jerdon I., 70). The Dún and warm valleys.

36. Limnaetus nipalensis, the Nepal hawk-eagle (Jerdon I., 73). 5,000 to 8,000 feet; rare.

38. Circaetus gallicus, the short-toed eagle (Jerdon I., 76). The Dún and warm valleys; rare.

39. Spilornis cheela, the crested-serpent eagle (Jerdon I., 77). The Dún and lower hills; not uncommon.

40. Pandion haliaetus, the osprey (Jerdon I., 80). The Dún and valleys of big rivers.

41 (*bis*) Polioaetus plumbeus, the Himalayan fishing eagle (S. F. III. 385). The Dún and valleys of big rivers.

42. Haliaetus leucoryphus, the ring-tailed fishing eagle (Jerdon I., 82). The Dúns only.

45. Buteo ferox, the long-legged buzzard (Jerdon I., 88). The Dún in winter; not very common.

46. Buteo leucocephalus, the upland buzzard (Jerdon I., 90). At great elevations; extremely rare.

47. Buteo plumipes, the harrier buzzard (Jerdon I., 91). Not uncommon from 5,000 to 8,000 feet.

48. Butastur teesa, the white-eyed buzzard (Jerdon I., 92). The Dúns only; rather rare.

50. Circus cyaneus, the hen harrier (Jerdon I., 95). The lower hills in winter only; rare.

51. Circus macrurus, the pale harrier (Jerdon I., 96). The Dúns; common in winter only.

52. Circus cineraceus, Montague's harrier (Jerdon I., 97). The Dúns and lower hills, in winter only.

53. Circus melanoleucus, the pied harrier (Jerdon I., 98). The Dúns and lower hills in winter only; very rare.

54. Circus æruginosus, the marsh harrier (Jerdon I., 99). The Dúns only; common in winter.

55. Haliastur indus, the brahminy kite (Jerdon I., 101). The Dúns; only permanent; not common.

56. Milvus affinis, the common pariah kite (Jerdon I., 104). Common up to 7,000 feet.

56. (*bis*) Milvus govinda, the larger Indian kite (Hume's rough notes, I. p. 326). Not uncommon at all elevations.

57. Pernis ptilorhynchus, the crested honey buzzard (Jerdon I., 108). The Dúns and warm valleys.

59. Elanus cœruleus, the black-winged kite (Jerdon I., 112). The Dúns and warm valleys.

61. Strix candida, the grass owl (Jerdon I., 118). The Dúns and outer hills; not uncommon.

63. Syrnium newarense, the Nepal brown wood owl (Jerdon I., 122). About 5,000 to 8,000 feet; rare.

65. Syrnium ocellatum, the mottled wood owl (Jerdon I, 123). The Dúns and warm valleys.

66. Syrnium nivicolum, the Himalayan wood owl (Jerdon I., 124). 5,000 feet and upwards; rare

67. Asio otus, the long-eared owl (Jerdon I., 125). At all elevations in the winter; rare.

68. Asio accipitrinus, the short-eared owl (Jerdon I., 126). At all elevations in the winter; rare.

69. Bubo bengalensis, the rock horned owl (Jerdon I. 128). The Dúns and warm valleys only.

70. Bubo coromandus, the dusky horned owl (Jerdon I., 130). The Dúns and warm valleys.

72. Ketupa ceylonensis, the brown fish owl (Jerdon I., 133). The Dúns and warm valleys.

74. Scops pennatus, the Indian scops owl (Jerdon I., 136). At moderate elevations; not common.

74. (*bis*) Scops sunia, the Indian red scops owl (Jerdon I., 137). At moderate elevations; not common.

74. (*ter*) Scops spilocephalus, the bare-foot scops owl (S. F. VII., 352). 5,000 to 8,000 feet; common.

75. Scops lettia, the Nepal scops owl (Jerdon I., 139). Kumaun only; 5,000 feet; rare.

75. (*bis*) Scops plumipes, the plume-foot scops owl (S. F. VII, 357). Garhwál only; rare.

75. (*ter.*) Scops bakkamœna, Tennant's scops owl (Jerdon I., 139., S. F. VII., 359). The Dúns and warm valleys.

76. Carine brama, the spotted owlet (Jerdon I., 141). The Dúns only; not common.

77. Glaucidium radiatum, the jungle owlet (Jerdon I., 143). The Dúns; common.

78. Glaucidium cuculoides, the large barred owlet (Jerdon I., 145). The lower hills up to 6,000 feet.

80. Glaucidium brodiei, the collared pigmy owlet (Jerdon I., 146). From 4,000 to 10,000 feet; tolerably common.

81. Ninox lugubris, the dusky hawk owl (Jerdon I., 147, in p. S.F. IV., 285). The Dúns and warm valleys; very rare.

82. Hirundo rustica, the common swallow (Jerdon I., 157). Not uncommon at 5,000 to 10,000 feet.

84. Hirundo filifera, the wire-tailed swallow (Jerdon I., 159). The Dúns only; common.

85. (*bis*). Hirundo nipalensis, the Himalayan mosque swallow (S. F. V. 262). Common up to 8,000 feet.

86. Hirundo fluvicola, the Indian cliff swallow (Jerdon I., 161). The Dúns only; very local.

89. Cotyle sinensis, the Chinese sand martin (Jerdon I., 164). The Dúns only; common.

91. Ptigonoprogne rupestris, the crag martin (Jerdon I., 166). From 7,000 to 10,000 feet; rare.

93. Chelidon kashmirensis, the Kashmir martin (Jerdon I., 167). From 7,000 to 10,000 feet; not common.

98. Cypselus melba, the alpine swift (Jerdon I., 175). Common at 3,000 to 8,000 feet.

99. Cypselus apus, the European swift (Jerdon I., 177). At 6,000 to 10,000 feet; very rare.

100. Cypselus affinis, the common Indian swift (Jerdon I., 177). Very common up to 8,000 feet.

103. Collocalia unicolor, the Indian swiftlet (Jerdon I., 182). At 5,000 to 9,000 feet; not uncommon.

104. Dendrochelidon coronatus, the Indian crested swift (Jerdon I., 185). The Dúns only; very rare.

107 Caprimulgus indicus. The jungle nightjar (Jerdon I., 192). Up to about 4,000 feet; not common.

109. Caprimulgus albonotatus, the large Bengal nightjar (Jerdon I., 194). Up to about 4,000 feet; common.

112. Caprimulgus asiaticus, the common Indian nightjar (Jerdon I., 197). Up to 6,000 feet; not common.

114. Caprimulgus monticolus, Franklin's nightjar (Jerdon I., 198). The Dúns and up to 5,000 feet; common.

117. Merops viridis, the common bee-eater (Jerdon I., 205). The Dúns only; very common.

118. Merops philippensis, the blue-tailed bee-eater (Jerdon I., 207). The Dúns and warm valleys; local.

119. Merops swainsoni, the chesnut-headed bee-eater (Jerdon I., 208; S. F. II, 163). The Dúns; local.

122. Nyctiornis athertoni, the blue-ruffed bee-eater (Jerdon I., 211). The Dúns; local.

123. Coracias indica, the common roller (Jerdon I., 214). The Dúns; common.

125. Coracia garrula, the European roller (Jerdon I., 218). The Bhagirati valley; a very rare straggler.

126. Eurystomus orientalis, the broad-billed roller (Jerdon I., 219). Kumaun Bhábar; very rare.

127. Pelargopsis gurial, the Indian stork-billed kingfisher (Jerdon I., 222). The Dúns; rare.

129. Halcyon smyrnensis, the white-breasted kingfisher (Jerdon I., 224). The Dúns; common.

134. Alcedo bengalensis, the little Indian kingfisher (Jerdon I., 230). Common along the big rivers.

136. Ceryle rudis, the pied kingfisher (Jerdon I., 232). The Dúns only; common.

137. Ceryle guttata, the large-crested pied kingfisher (Jerdon I., 334). The Dúns and warm valleys.

138. Psarisomus dalhousiæ, the yellow-throated broad-bill (Jerdon I., 236). From 3,000 to 8,000 feet.

140. Dichoceros cavatus, the great hornbill (Jerdon I., 242). The Dúns and sub-Himálayan forests.

143. Hydrocissa affinis, the Dehra Dún hornbill (Jerdon I., 247). The Dúns only; not uncommon.

144. Ocyceros birostris, the common grey hornbill (Jerdon I., 248). The Dúns only.

147. Palæornis nipalensis, the northern rose-barred paroquet (S. F. I., 335, and II., 10). The Dúns only; common.

148. Palæornis torquatus, the rose-winged paroquet (Jerdon I., 257). The Dúns and warm valleys; common.

149. Palæornis purpureus, the rose-headed paroquet (S. F. II., 15). The Dúns and warm valleys; common.

150. Palæornis schisticeps, the slaty-headed paroquet (Jerdon I., 261). From 4,000 to 8,000 feet; common.

152. Palæornis javanicus, the red-breasted paroquet (Jerdon I., 262). In the warm valleys; not common.

154. Picus himalayensis, the Himalayan pied woodpecker (Jerdon I, 269). From 5,000 o 10,000 feet.

157. Picus macei, the Indian spotted woodpecker. (Jerdon I., 272). From the Dúns to 6,000 feet.

159. Picus brunneifrons, the brown-fronted woodpecker (Jerdon I., 273). The Dúns to 6,000 feet.

160. Picus mahrattensis, the yellow-fronted woodpecker (Jerdon I, 274). The Dúns only.

161. Hypopicus hyperythrus, the rufous-bellied pied woodpecker (Jerdon I., 276). From 4,000 to 8,000 feet.

163. Yungipicus pygmæus, the Himalayan pigmy woodpecker (Jerdon I., 277). From 2,000 to 5,000 feet.

164. Yungipicus nanus, the southern pigmy woodpecker (Jerdon I., 278). The Dúns only.

166. Chrysocolaptes sultaneus, the golden-backed woodpecker (Jerdon I., 281). From 3,000 to 9,000 feet; rare.

168. Muelleripicus pulverulentus, the large slaty woodpecker (Jerdon I., 284). The Dúns only; very rare.

170. Gecinus squamatus, the scaly-bellied green woodpecker (Jerdon I, 286). From 4,000 to 8,000 feet; common.

171. Gecinus striolatus, the lesser Indian green woodpecker (Jerdon I., 287). The Dúns only; rare.

172. Gecinus occipitalis, the black-naped green woodpecker (Jerdon I., 287). From 4,000 to 8,000 feet; common.

173. Chrysophlegma flavinucha, the large yellow-naped woodpecker (Jerdon I., 289). From 2,000 to 6,000 feet.

174. Chrysophlegma chlorolophus, the lesser yellow-naped woodpecker (Jerdon I., 289). The Dúns and warm valleys; rare.

178. Micropternus phæoceps, the Bengal rufous woodpecker (Jerdon I., 294). The Dúns and warm valleys; rare.

180. Brochypternus aurantius, the common goldback woodpecker (Jerdon I., 295). The Dúns only; very common.

183. Tiga shorii, the large three-toed woodpecker (Jerdon I., 298). The Dúns and warm valleys; rare.

186. Vivia innominata, the speckled-piculet (Jerdon I., 300). From 2,000 to 5,000 feet; not uncommon.

188. Yunx torquilla, the wryneck (Jerdon I., 303). The Dúns only; not uncommon.

191. Megalæma marshallorum, the Marshall's barbet (Jerdon I., 308). From 4,000 to 8,000 feet; common.

192. Megalæma hodgsoni, Hodgson's green barbet (Jerdon I., 309). The warm valleys; common.

193. Megalæma caniceps, Frankin's green barbet (Jerdon I., 310). The Sewaliks and Bhábar only.

195. Megalæma asiatica, the blue-throated barbet (Jerdon I., 313). The warm valleys only.

197. Xantholæma hæmacephala, the crimson-breasted barbet (Jerdon I., 315). The Dúns only; common.

199. Cuculus canorus, the common cuckoo (Jerdon I., 322). A summer migrant.

200. Cuculus striatus, the Himalayan cuckoo (Jerdon I., 323). Common from 3,000 to 7,000 feet.

201. Cuculus poliocephalus, the hoary-headed cuckoo (Jerdon I., 324). Common up to 6,000 feet.

203. Cuculus micropterus, the Indian cuckoo (Jerdon I., 326). Common up to about 6,000 feet.

205. Hierococcyx varius, the common hawk-cuckoo, (Jerdon I., 329). The Dúns only; common.

207. Hierococcyx sparverioides, the large hawk-cuckoo (Jerdon I., 331). From 5,000 to 5,000 feet; common.

208. Cacomantis passerinus, the Indian plaintive cuckoo (Jerdon I., 333). The Dúns and warm valleys; rare.

210. Surniculus lugubris, the Drongo cuckoo (Jerdon I., 336) The Dúns and warm valleys; rare.

211. Chrysococcyx maculatus, the emerald cuckoo, (Jerdon I., 338., S. F. VI., 161). From 3,000 to 5,000 feet; rare.

212. Coccystes jacobinus, the pied-crested cuckoo (Jerdon I., 339). Up to 4,000 feet; common in the rains.

214. Eudynamis honorata, the koel (Jerdon I., 342). The Dúns only; common in the hot weather.

217. Centrococcyx rufipennis, the common coucal (Jerdon I., 348). The Dúns only.

220. Taccocua sirkee, the Bengal sirkeer (Jerdon I., 353). The Dúns only.

225. Æthopyga miles, the Himálayan red honey-sucker (Jerdon I., 362). The warm valleys only.

227. Æthopyga gouldiæ, the purple-tailed red honey-sucker (Jerdon I., 364). The warm valleys only.

228. Æthopyga ignicauda, the fire-tailed red honey-sucker (Jerdon I., 365). The warm valleys only.

229. Æthopyga nipalensis, the maroon-backed honey-sucker (Jerdon I., 366). From 2,000 to 6,000 feet.

230. Æthopyga horsfieldii, the green-backed honey-sucker Jerdon I., 367). The warm valleys only.

231. Æthopyga saturata, the black-breasted honey-sucker (Jerdon I., 367). From 2,000 to 5,000 feet.

234. Cinnyris asiatica, the purple honey-sucker (Jerdon I., 370). Up to 3,000 feet; common.

253. Cinnyris lotenia, the large purple honey-sucker (Jerdon I, 372). The Dehra Dún; a rare straggler.

238. Dicæum erythrorhynchus, Tickell's flower-pecker (Jerdon I., 374). The Dúns only; not common.

240. Piprisoma agile, the thick-billed flower-pecker (Jerdon I., 376). The Dúns and warm valleys.

241. Myzanthe ignipectus, the fire-breasted flower-pecker (Jerdon I., 377). Kumaun only; very rare.

243. Certhia himalayana, the Himálayan tree-creeper (Jerdon I., 380). From 4,000 to 8,000 feet; common.

246. Salpornis spilonota, the spotted grey-creeper (Jerdon I, 382). The Dúns only; rare.

247. Tichodroma muriaria, the red-winged wall-creeper (Jerdon I., 383). Not uncommon.

248. Sitta himalayensis, the white-tailed nuthatch (Jerdon I., 385). From 5,000 to 8,000 feet; common.

250. Sitta castaneoventris; the chesnut-bellied nuthatch (Jerdon I., 386) The Dúns only.

251. Sitta cinnamomeoventris, the cinnamon-bellied nuthatch (Jerdon I., 387). From 2,000 to 4,000 feet.

253. Dendrophila frontalis, the velvet-fronted blue nuthatch (Jerdon I., 388) From 3,000 to 5,000 feet.

254. Upupa epops, the European hoopoe (Jerdon I., 390) Not very common.

255. Upupa ceylonensis, the Indian hoopoe (Jerdon I., 392). The Dúns and warm valleys; common.

256. Lanius lahtora, the Indian grey shrike (Jerdon I., 400). The Dúns only; rare.

257. Lanius erythronotus, the rufous-backed shrike (Jerdon I., 402). Up to 4,000 feet; common.

257. (*bis.*) Lanius caniceps, the pale rufous-backed shrike (S. F. VII., 374). The Dehra Dún; rare.

258. Lanius tephronotus, the grey-backed shrike (Jerdon I., 403). From 2,000 to 4,000 feet; common.

259. Lanius nigriceps, the black-headed shrike (Jerdon I., 404). From 2,000 to 5,000 feet; rare.

260. Lanius vittatus, the bay-backed shrike (Jerdon I., 405). The Dúns and warm valleys.

261. Lanius cristatus, the brown shrike (Jerdon I., 406). In the cold weather only; not common.

265. Tephrodornis pondiceriana, the common woodshrike (Jerdon ., 410). The Dúns only.

267. (*bis*) Hemipus capitalis, the Himalayan pied shrike (S. F. I., 435). The Dúns and up to 5,000 feet; rare.

268. Volvocivora sykesii, the black-headed cuckoo shrike (Jerdon I., 414) The Dúns and warm valleys; rare.

269. Volvocivora melaschista, the dark grey cuckoo shrike (Jerdon I., 415). Up to 7,000 feet; not common.

270. Graucalus macei, the large cuckoo shrike (Jerdon I., 417). The Dúns only; rare.

271. Pericrocotus speciosus, the large minivet (Jerdon I., 419). Up to 8,000 feet; not uncommon.

273. Pericrocotus brevirostris, the short-billed minivet (Jerdon I., 421). Up to 8,000 feet; common.

275. Pericrocotus roseus, the rosy minivet (Jerdon I., 422). The Dúns and warm valleys.

276. Pericrocotus peregrinus, the small minivet (Jerdon I., 423). The Dúns only; common.

278. Buchanga atra, the common drongo-shrike (Jerdon I. 427). Up to 4,000 feet; common.

279. Dicrurus annectans, the crow-billed drongo (Jerdon I., 430). In the warm valleys; rare.

280. Buchanga longicaudata, the long-tailed drongo (Jerdon I., 430). From 4,000 to 7,000 feet; common.

281. Buchanga cœrulescens, the white-bellied drongo (Jerdon I., 432). The Dúns and warm valleys; rare.

282. Chaptia ænea, the bronzed drongo (Jerdon I., 433). In the warm valleys; very rare.

284. Dissemurus grandis, the large racket-tailed drongo (Jerdon I., 435). In the warm valleys; rare.

286. Chibia hottentotta, the hair-crested drongo (Jerdon I., 439). In the warm valleys; rare.

287. Artamus fuscus, the ashy swallow shrike (Jerdon I., 441). From 3,000 to 5,000 feet; common.

288. Muscipeta paradisii, the paradise flycatcher (Jerdon I., 445). In the Dúns and warm valleys; common.

290. Myiagra azurea, the black-naped blue flycatcher (Jerdon I., 450). In the warm valleys; rare.

291. Leucocerca albicollis, the white-throated fantail (Jerdon I., 451). From 2,000 to 5,000 feet; common.

292. Leucocerca aureola, the white-browed fantail (Jerdon I., 452). The Dúns only; common.

294. Chelidorhynx hypoxantha, the yellow-bellied fantail (Jerdon I., 455). The warm valleys; rare.

295. Culicicapa ceylonensis, the grey-headed flycatcher (Jerdon I., 455). Up to 8,000 feet; very common.

296. Hemichelidon sibiricus, the sooty flycatcher (Jerdon I., 458). From 6,000 to 10,000 feet; common.

297. Alseonax latirostris, the southern brown flycatcher (Jerdon I., 459). From 3,000 to 8,000 feet; common.

301. Stoporala melanops, the verditer flycatcher (Jerdon I., 463). From 4,000 to 8,000 feet; common.

304. Cyornis rubeculoides, the blue-throated redbreast (Jerdon I., 466). Up to 6,000 feet; not common.

310. Muscicapula superciliaris, the white-browed blue flycatcher (Je rdon I., 470). Up to 8,000 feet; common.

314. Niltava sundara, the rufous-bellied fairy bluechat (Jerdon I.,473). Up to 5,000 feet; not common.

319. Siphia strophiata, the orange gorgetted flycatcher (Jerdon I., 479). From 5,000 to 8,000 feet; very rare.

320. Siphia leucomelanura, the slaty flycatcher (Jerdon I., 479) From 5,000 to 7,000 feet; rare.

323. (*bis*). Erythrosterna parva, the white-tailed robin flycatcher (Jerdon I., 481, S. F. V., 471). The Dúns; common.

323. (*ter.*) Erythrosterna hyperythra, the rufous-bellied robin flycatcher (S. F. V., 471). The Dúns; rare.

326. Erythrosterna maculata, the little pied flycatcher (Jerdon I., 483). From 3,000 to 6,000 feet; rare.

333. Troglodytes nipalensis, the Nepal wren (Jerdon I., 491). From 4,000 to 10,000 feet; rare.

342. Myiophonus temminckii, the yellow-bellied whistling thrush (Jerdon I., 500). Common up to 8,000 feet.

345. Pitta brachyura, the yellow-breasted ground thrush (Jerdon I., 503). Not rare up to 5,000 feet.

347. Cinclus asiaticus, the brown water ouzel (Jerdon I., 506). Common up to 5,000 feet.

350. Zoothera monticola, the large brown thrush (Jerdon I., 509). Rare, 6,000 to 8,000 feet.

351. Cyanocinclus cyanus, the blue rock thrush (Jerdon I., 511). In the Dúns and low hills in the cold weather.

352. Petrophila erythrogaster, the chesnut-bellied thrush (Jerdon I. 514). 5,000 to 8,000 feet; common.

353. Petrophila cinclorhyncha, the blue-headed chat thrush (Jerdon I., 515). 3,000 to 8,000 feet; common.

355. Geocichla citrina, the orange-headed ground thrush (Jerdon I., 517). Up to 5 000 feet; not common.

356. Geocichla unicolor, the dusky ground thrush (Jerdon I., 519). Up to 8,000 feet; common.

357. Turdulus wardii, Ward's pied-blackbird (Jerdon I., 520). 5,000 to 8,000 feet; common.

358. Geocichla dissimilis, the variable pied-blackbird (Jerdon I., 521). 7,000 feet; very rare.

361. Merula boulboul, the grey-winged blackbird (Jerdon I., 525). Up to 8,000 feet; common.

362. Merula albocincta, the white-collared ouzel (Jerdon I., 526). 6,000 to 8,000 feet; not rare.

363. Merula castanea, the grey-headed ouzel (Jerdon I., 526). 5,000 to 8,000 feet; rare.

365. Turdus atrogularis, the black-throated thrush (Jerdon I., 529). Common in the cold weather.

368. Turdus viscivorus, the missel thrush (Jerdon I., 531). 5,000 to 10,000. feet; not common.

370. Oreocincla mollissima, the plain-backed mountain thrush (Jerdon I., 533). Very rare.

371. Oreocincla dauma, the small-billed mountain thrush (Jerdon I., 533). Up to 8,000 feet; common.

382. Grammatoptila striata, the striated jay thrush (Jerdon II., 11). 5,000 to 8,000 feet; not common.

85. Pyctorhis sinensis, the yellow-eyed babbler (Jerdon II., 15). Up to 3,000 feet; common.

392. Stachyris pyrrhops, the red-billed wren babbler (Jerdon II., 22). 3,000 6,000 feet; rare.

403. Pomatorhinus leucogaster, Gould's scimitar babbler (Jerdon II., 30). The Dúns and warm valleys; rare.

405. Pomatorhinus erythrogenys, the rusty-cheeked scimitar babbler (Jerdon II., 31). 3,000 to 6,000 feet; common.

407. Garrulax leucolophus, the white-crested laughing thrush (Jerdon II., 35). The Dúns and warm valleys.

411. Garrulax albogularis, the white-throated laughing thrush (Jerdon II., 38). 5,000 to 8,000 feet; common.

415. Trochalopteron erythrocephalum, the red-headed laughing thrush (Jerdon II., 43). 5,000 to 8,000 feet; common.

418. Trochalopteron variegatum, the variegated laughing thrush (Jerdon II., 45). 2,000 to 5,000 feet; rare.

421. Trochalopteron rufogulare, the fufous-chinned laughing thrush (Jerdon II., 47). 2,000 to 5,000 feet; rare.

425. Trochalopteron lineatum, the streaked laughing thrush (Jerdon II., 50). 4,000 to 8,000 feet; very common.

427. Actinodura egertoni, the rufous bar-wing (Jerdon II., 52). 5,000 to 8,000 feet; rare.

429. Sibia capistrata, the black-headed sibia (Jerdon II., 54). 4,000 to 8,000 feet; very commou.

432. Malacocircus terricolor, the Bengal babbler (Jerdon II., 59). The Dúns only.

436. Argya malcolmi, the large grey babbler (Jerdon II., 64). The Dúns only.

438. Chatarrhœa caudata, the striated bush-babbler (Jerdon II., 67). The Dúns only.

439. Chatarrhœa earlii, the striated reed-babbler (Jerdon II., 68). The Dúns only.

444. Hyptipetes psaroides, the Himalayan black bulbul (Jerdon II., 77). 3,000 to 8,000 feet; common

447. Hypsipetes mclellandi, the rufous-bellied bulbul (Jerdon II., 79). From 3,000 to 8,000 feet; common.

456. Rubigula flaviventris, the black-crested yellow bulbul (Jerdon II., 88). 3,000 to 8,000 feet; rare.

458. Otocompsa leucogenys, the white-cheeked crested bulbul (Jerdon II., 90). Up to 8,000 feet; common.

461. Pycnonotus pygæus, the common Bengal bulbul (Jerdon II., 93). Up to 7,000 feet; common.

462. Pycnonotus hæmorrhous, the common Madras bulbul (Jerdon II., 94). The Dúns only.

465. Phyllornis aurifrons, the gold-fronted green bulbul (Jerdon II., 99) The Dúns and warm valleys.

466. Phyllornis hardwickii, the blue-winged green bulbul (Jerdon II., 100). Up to 6,000 feet, not rare.

468. Iora typhia, the white-winged green bulbul (Jerdon II., 103). The Dúns and warm valleys.

470. Oriolus kundoo, the Indian golden oriole (Jerdon II., 107). Up to 4,000 feet; common.

471. Oriolus indicus, the black-naped Indian oriole (Jerdon II., 109). The Dúns only; rare.

472. Oriolus melanocephalus, the black-headed oriole (Jerdon II., 110). The Dúns and warm valleys.

474. Oriolus traillii, the maronne oriole (Jerdon II., 112). Kumaon only; rare.

475. Copsychus saularis, the magpie robin (Jerdon II., 114). Up to 4,000 feet; common.

476. Kittacincla macroura, the shama (Jerdon II., 116). In the Dúns only; very rare.

477. Myiomela leucura, the white-tailed blue-chat (Jerdon II., 118). 6,000 to 9,000 feet; very rare.

480. Thamnobia cambaiensis, the brown-backed Indian robin (Jerdon II., 122). The Dúns only; common.

481. Pratincola caprata, the white-winged black robin (Jerdon II., 123). Up to 5,000 feet; common.

483. Pratincola indicus, the Indian bush-chat (Jerdon II., 124). Up to 5,000 feet; common.

486. Pratincola ferreus, the dark-grey bush-chat (Jerdon II., 127). Up to 8,000 feet; common.

497. Ruticilla rufiventris, the Indian redstart (Jerdon II., 137). The Dúns and warm valleys.

498. Ruticilla hodgsoni, Hodgson's redstart (Jerdon II., 138). Near the snows; rare.

499. Ruticilla erythogastra, the white-winged redstart (Jerdon II., 139). Near the snows; rare.

533. Ruticilla frontalis, the blue-fronted redstart (Jerdon II., 141). Near the snows; common.

504. Ruticilla cæruleocephala, the blue-headed redstart (Jerdon II, 141). In the higher valleys; common.

505. Rhyacornis fuliginosus, the plumbeous water-robin (Jerdon II., 142). Up to the snow level; common.

506. Chœmarrornis leucocephalus, the white-capped redstart (Jerdon II., 143). Up to the snow level; common.

507. Larvivora superciliaris, the blue woodchat (Jerdon II., 145). In valleys, 3,000 to 6,000 feet.

508. Ianthia cyanura, the white-breasted blue woodchat (Jerdon II., 146). From 4,000 to 8,000 feet.

512. Calliope kamtschatkensis, the common ruby-throat (Jerdon II., 150) The Dúns in the cold weather.

513. Calliope pectoralis, the white-tailed ruby-throat (Jerdon II., 151). In the elevated valleys.

514. Cyanecula suecica, the Indian blue-throat (Jerdon II., 152). In the Dúns in winter.

515. Acrocephalus stentorius, the large red-warbler (Jerdon II., 154). In the Dúns in winter.

515. Acrocephalus dumetorum, the lesser red-warbler (Jerdon II., 155). The valleys and lower hills.

516. Acrocephalus agricolus, the paddy-field warbler (Jerdon II., 156). The valleys and lower hills.

527. (*bis.*) Horornis pallidus, the pale hill-warbler (S. F. III., 241). From 4,000 to 8,000 feet; rare.

530. Orthotomus sutoria, the Indian tailor-bird (Jerdon II., 165). The Dúns and warm valleys.

535. Prinia stewarti, Stewart's wren-warbler (Jerdon II., 171). The Dúns only; common.

536. Prinia gracilis, Franklin's wren-warbler (Jerdon II., 172). Common at moderate elevations.

537. Prinia cinereo-capilla, Hodgsons' wren-warbler (Jerdon II., 172). The Dúns and lower hills.

538. Prinia hodgsoni, the Malabar wren-warbler (Jerdon II., 173). Probably identical with No. 536.

539. Cisticola cursitans, the rufous grass-warbler (Jerdon II, 174). The Dúns only; rare.

543. Drymœca inornata, the common wren-warbler (Jerdon II., 178). The Dúns only; common.

544. (*bis.*) Drymœca rufescens, the great rufous wren-warbler (S. F. I., 437). The Dúns only; rare.

547. Suya crinigera, the brown mountain wren-warbler (Jrdon II., 183). At 8,000 to 3,800 feet.

549. Suya atrigularis, the black-breasted wren-warbler (Jerdon II., 184). From 4,000 to 6,000 feet; rare.

551. Franklinia buchanani, the rufous-fronted wren-warbler (Jerdon II., 186). The Dúns only; rare.

553. Hypolais rama, Sykes' warbler (Jerdon II., 189). The Dúns only; not common.

554. Phylloscopus tristis, the brown tree-warbler (Jerdon II., 190). The Dúns in the cold weather.

556. Phylloscopus magnirostris, the large-billed tree-warbler (Jerdon II., 191). Not uncommon.

559. Phylloscopus nitidus, the bright-green tree-warbler (Jerdon II., 193). Not common.

560. Phylloscopus viridanus, the greenish tree-warbler (Jerdon II., 193). Common in the cold-weather.

560. (*bis.*) Phylloscopus tytleri, Tytler's tree-warbler (S. F. III., 243N). Kumaun only; rare.

561. Phylloscopus affinis, Tickell's tree-warbler (Jerdon II., 194). In the cold weather; not common.

562. Phylloscopus indicus, the olivaceous tree-warbler (Jerdon II, 194). In the cold-weather; rare

563. Reguloides occipitalis, the large crowned warbler (Jerdon II., 196) Dehra Dún; very rare.

565. (*bis.*) Reguloides humii, Brook's tree-warbler (S. F. VII., 131). In the Dúns only; common in winter.

566. Reguloides proregulus, the yellow-rumped warbler (Jerdon II., 197). Not uncommon.

567. Reguloides viridipennis, the green-winged warbler (Jerdon II., 198). Not uncommon.

569. Culicepeta burkii, the black-browed warbler (Jerdon II., 199). In the higher valleys; rare.

571. Abrornis schisticeps, the black-eared warbler (Jerdon II., 201). 5,000 to 8,000 feet; common.

573. Abrornis albosuperciliaris, the white-browed warbler (Jerdon II., 202). Very common.

580. Regulus himalayensis. the Himalayan fire-crest (Jerdon II., 205) 8,000 to 10,000 feet; rare.

582. Sylvia affinis, the allied grey warbler (Jerdon II., 209). The Dúns only in the cold-weather.

584. Henicurus maculatus, the spotted forktail (Jerdon II., 212). Up to 6,000 feet; common.

586. Henicurus schistaceus, the slaty-backed forktail (Jerdon II., 214). Kumaun only; rare.

587. Henicurus scouleri, the short-tailed forktail (Jerdon II., 214). 2,000 to 6,000 feet; common.

589 Motacilla madraspatensis, the pied wagtail (Jerdon II., 217). The Dúns only; common.

589. (*bis*) Motacilla hodgsoni, Hodgson's pied wagtail (S. F. I., 26). Up to 10,000 feet; not common.

591. Motacilla personata, the black-faced wagtail (Jerdon II., 218). The Dúns only in the winter.

592. Calobates melanope, the grey and yellow wagtail (Jerdon II., 220). Up to 10,000 feet; common.

593. Budytes cinereocapilla, the grey-capped field wagtail (Jerdon II, 222; S.F. VI., 363) The Dúns only.

593. (*bis.*) Budytes melanocephala, the black-headed field wagtail (S F. VI., 363). The Dúns only.

593. (*ter.*) Budytes flava; the yellow wagtail (S. F. VI., 363). The Dúns only; common.

594. Budytes calcarata; the black and yellow wagtail (S. F. VII., 401). Up to 8,000 feet; not common.

594. (*bis*) Budytes citreola, the grey-headed yellow wagtail (S. F. VII., 401). The Dúns in winter.

596. Anthus maculatus; the Indian tree-pipit (Jerdon II., 228). Up to 8,000 feet; not rare.

597. Anthus arboreus; the tree pipit (Jerdon II., 229). In the Dúns in the cold weather.

600. Corydalla rufula, the Indian titlark (Jerdon II., 232). The Dúns and warm valleys.

604. Agrodroma sordida; the brown rock-pipit (Jerdon II., 236). Up to 3,000 feet; not common.

605. Anthus rosaceus, the vinous-throated pipit (Jerdon II., 237). 8,000 to 12,000 feet; common.

606. Heterura sylvana, the upland pipit (Jerdon II., 239). 3,000 to 8,000 feet; common.

607. Cochoa purpurea, the purple thrush-tit (Jerdon II, 243). 3,000 to 8,000 feet; rare.

608. Cochoa viridis, the green thrush-tit (Jerdon II, 243). 3,000 to 8,000 feet; rare.

609. Pteruthius erythropterus, the red-winged shrike-tit (Jerdon II., 245). 4,000 to 8,000 feet; rare.

614. Leiothrix lutea, the red-billed hill-tit (Jerdon II., 250). Up to 8,000 feet; not uncommon.

616. Siva strigula, the stripe-throated hill-tit (Jerdon II., 252). 5,000 to 9,000 feet; not common.

617. Siva cyanouroptera, the blue-winged hill-tit (Jerdon II, 253). Kumaon 7,000 feet; rare.

623. Ixulus flavicollis, yellow-naped flowerpecker (Jerdon II., 258) 6,000 to 3,000 feet; not rare.

626. Yuhina occipitalis, the slatey-headed hill-tit (Jerdon II., 261). Kumaon, 8,000 feet; rare.

631. Zosterops palpebrosus, the white-eyed tit (Jerdon II., 265). Common up to 7,000 feet.

632. Sylviparus modestus, the yellow-browed flowerpecker (Jerdon II., 267). 4,000 to 8,000 feet; not common.

634. Egithaliscus erythrocephalus, the red-hoaded tit (Jerdon II., 270). 4,000 to 8,000 feet; very common.

638. Lophophanes melanolophus, the crested black-tit (Jerdon II, 273). 5,000 to 8,000 feet; common.

640. Lophophanes rufonuchalis, the Simla black-tit (Jerdon II., 274). 9,000 to 12,000 feet; not rare.

644. Parus monticolus, the green-backed tit (Jerdon II., 277). 4,000 to 8,000 feet; very common.

645 Parus nipalensis, the Indian grey-tit, (Jerdon II., 278; S.F. VII., 220N). Up to 7,000 feet, not common.

647. Machlolophus xanthogenys, the yellow-cheeked tit (Jerdon II., 279). 4,000 to 8,000 feet; not very common.

658. Corvus tibetanus, the Thibet raven (Jerdon II., 294). At great elevations; rare.

660. Corvus culminatus, the Indian corbie (Jerdon II., 295). The Dúns only; common

661. Corvus intermedius, the blackhill crow (Jerdon II., 297). 4,000 to 9,000 feet; common.

663. Corvus splendens, the common Indian crow (Jerdon II., 298). Up to 5,000 feet; common.

666. Nucifraga hemispila, the Himalayan nut-cracker (Jerdon II., 304). 6,000 to 10,000 feet; common.

669. Garrulus bispecularis, the Himalayan jay (Jerdon II., 307). 5 000 to 8,000 feet; common.

670. Garrulus lanceolatus, the black-throated jay (Jerdon II., 308). 4,000 to 8,000 feet; very common.

671. Urocissa occipitalis, the red-billed blue magpie (Jerdon II., 309). 3,000 to 5,000 feet; common.

673. Cissa chinensis, the green jay (Jerdon II., 312). In Kumaon only; up to 7,000 feet; rare.

674. Dendrocitta rufa, the common Indian magpie (Jerdon II, 314). The Dúns only; common.

676. Dendrocitta himalayensis, the Himálayan magpie (Jerdon II., 316). Up to 5,000 feet; common.

679. Fregilus himalayanus, the Himálayan chough (Jerdon II., 319). At high elevations; rare.

681. Sturnus vulgaris, the common starling (Jerdon II., 321). The Dúns in winter only; rare.

683. Sturnopastor contra, the pied starling (Jerdon II., 323). The Dúns only; common.

684. Acridotheres tristis, the common mynah (Jerdon II., 325). Up to 7,000 feet; common.

686. Acridotheres fuscus, the jungle mynah (Jerdon II., 327). Up to 7,000 feet; common.

687. Sturnia pagodarum, the Brahminy mynah (Jerdon II., 329). The Dúns only; not common.

688. Sturnia malabarica, the grey-headed mynah (Jerdon II., 330). The lower hills; rare

690. Pastor roseus, the rose-coloured starling (Jerdon II., 333). The Dúns only; common.

691. Saraglossa spiloptera, the spotted-winged stare (Jerdon II., 336). Up to 6,000 feet; common.

693. Eulabes intermedia, the Nepal hill mynah (Jerdon II., 339). The Kumaon bhábar; rare.

694. Ploceus philippinus, the common weaver-bird (Jerdon II., 343; S. F. VI. 399). The Dúns; common.

694. (*bis*) Ploceus megarhynchus, the great billed weaver-bird (S. F III., 406). Kumaun bhábar; rare.

695. Ploceus manyar, the striated weaver-bird (Jerdon II., 348). The Dúns only; common.

698. Munia rubronigra, the chestnut-bellied munia (Jerdon II., 353). The Dúns only; rare.

699. Munia punctulata, the spotted munia (Jerdon II., 354). Up to 6,000 feet; not uncommon.

702. Munia acuticauda, the Himálayan munia (Jerdon II., 356). Up to 5,000 feet; not common.

703. Munia malabarica, the plain brown munia (Jerdon II., 357). The Dúns only; common.

704. Estrelda amandava, the red wax bill (Jerdon II., 359). The Dúns to warm valleys; rare.

706. Passer indicus, the Indian house-sparrow (Jerdon II., 362). Up to 7,000 feet; very common.

708. Passer cinnamomeus, the cinnamon-headed sparrow (Jerdon II., 365). 4,000 to 7,000 feet; common.

710. Passer montanus, the mountain sparrow (Jerdon II., 366). From 3,000 to 7,000 feet; rare.

711. Gymnoris flavicollis, the yellow-throated sparrow (Jerdon II., 368). Up to 4,000 feet; common.

714. Emberiza stracheyi, the white-necked bunting (Jerdon II., 372). From 5,000 to 10,000 feet; rare.

716. Emberiza huttoni, the grey-necked bunting (Jerdon II., 373). Bhagirathi valley; rare.

719. Emberiza fucata, the greyheaded bunting (Jerdon II., 375). Kálsi on the Jumna; not rare.

720. Emberiza pusilla, the dwarf bunting (Jerdon II., 376). Inserted on Jerdon's authority.

724. Melophus melanicterus, the crested black bunting (Jerdon II., 381). The Dúns and warm valleys.

725. Hesperiphona icteriodes, the black and yellow grossbeak (Jerdon II., 384). Garhwál, near the snows.

726. Hesperiphona affinis, the allied grossbeak (Jerdon II., 385). Kumaon, near the snows.

727. Mycerobas melanoxanthus, the spotted winged grossbeak (Jerdon II., 386). Dehra Dún, up to 10,000 feet; rare.

728. Mycerobas carnipes, the white-winged grossbeak (Jerdon II., 387). Kumaon, near the snows ; rare.

729. Pyrrhula erythrocephala, the red-headed bullfinch (Jerdon II., 389). 6,000 to 10,000 feet ; rare.

738. Carpodacus erythrinus, the common rosefinch (Jerdon II , 398). Up to 10,000 feet ; not rare.

739. Propasser rhodopeplus, the spotted-winged rosefinch (Jerdon II., 400). Mussoorie ; rare.

740. Propasser rhodochlamys, the red-mantled rosefinch (Jerdon II., 401). Garhwál ; rare.

742. Propasser rhodochrous, the pink-browed rosefinch (Jerdon II., 402). 5,000 to 10,000 feet ; not rare.

743. Propasser pulcherrimus, the beautiful rosefinch (Jerdon II., 402). Kumaon (*teste* Jerdon).

743. (*bis.*) Propasser ambiguus, Wilson's rosefinch (S. F. II., 326). Garhwál 6,000 to 10,000 feet.

748. Callacanthis burtoni, the red-browed finch (Jerdon II., 407). The interior of Garhwál ; rare.

749. Carduelis caniceps, the Himálayan goldfinch (Jerdon II., 408). 6,000 to 10,000 feet ; common.

750. Hypacanthis spinoides, the Himálayan siskin (Jerdon II., 409), 4,000 to 9,000 feet ; not common.

51. Metoponia pusilla, the gold-headed finch (Jerdon II., 410) Common in the interior of Garhwál.

752. Fringilla montifringilla, the mountain finch (Jerdon II., 412). Mussoorie (*teste* Hutton) ; doubtful.

753. (*bis*) Fringillauda sordida, the Himálayan larkfinch (S. F. I , 41). In the interior of Garhwál.

754. Mirafra assamica, the Bengal bushlark (Jerdon II., 416). In the Dúns ; very local.

754. (*bis*) Mirafra immaculata, the mountain bushlark (S. F. T., 41). Near Chakráta (Marshall) ; rare.

756. Mirafra erythroptera, the red-winged bushlark (Jerdon II., 418). In the Dúns only ; not common.

760. Pyrrhulauda grisea, the black-bellied finch lark (Jerdon II., 424). In the Dúns only ; common.

761. Calandrella brachydactyla, the short-toed lark (Jerdon II., 426). The Dúns only, in winter ; rare.

763. Otocoris penicillata, the horned lark (Jerdon II., 429). In the interior of Kumaon.

766. Alauda dulcivox, the Himálayan skylark (Jerdon II., 433 ; S. F. I. 39). At all elevations ; not common.

767. Alauda gulgula, the Indian skylark (Jerdon II., 434). The Dúns only ; rare.

772. Crocopus phœnicopterus, the Bengal green pigeon (Jerdon III., 447). The Dúns only ; not common.

773. Crocopus chlorigaster, the southern green pigeon (Jerdon III., 448). The Dúns only ; not common.

778. Sphenocercus sphenurus, the kokla green pigeon (Jerdon III., 453). 4,000 to 8,000 feet ; common.

778. (*bis.*) Sphenocercus minor, the lesser kokla (S. F. III., 255). In the warm valleys of Garhwál.

783. Alsocomus hodgsoni, the speckled wood pigeon (Jerdon III., 463). Interior of Kumaon and Garhwál ; rare.

784. Palumbus casiotis, the Himálayan cushat (Jerdon III., 464). Interior of Kumaon and Garhwál ; rare.

787. Palumbœna eversmanni, the Indian stock pigeon (Jerdon III., 467). The Dúns only, in winter ; rare.

788 Columba intermedia, the Indian rock pigeon (Jerdon III., 469). The Dúns only ; common.

789. Columba rupestris, the blue hill pigeon (Jerdon III., 470). Rare ; probably migratory.

790. Columba leuconota, the white-bellied pigeon (Jerdon III., 471). Near the snows.

792. Turtur pulchratus, the ashy turtle dove (Jerdon III., 476 ; S. F. VI., 421). 5,000 to 10,000 feet ; common

794. Turtur cambaiensis, the brown turtle dove (Jerdon III., 478). The Dúns and lower hills ; common.

795. Turtur suratensis, the spotted dove (Jerdon III., 479). Up to 6,000 feet ; common.

796. Turtur risoria, the common ring dove (Jerdon III., 481) Up to 4,000 feet ; common.

797. Turtur humilis, the red turtle dove (Jerdon III., 482). The Dúns and warm valleys ; rare.

798. Chalcophaps indica, the bronze-winged dove (Jerdon III., 484). Up to 4,000 feet ; not common.

802. Pterocles exustus, the common sandgrouse (Jerdon III , 502). The Dúns only ; rare.

802. (*bis.*) Syrrhaptes tibetanus, the Tibetan sandgrouse (S. F. VII., 425). On the northern borders.

803. Pavo cristatus, the common peacock (Jerdon III., 506). The Dúns only ; common.

804. Lophophorus impeyanus, the monál (Jerdon III., 510). From 8,000 to 12,000 feet ; not uncommon.

805. Ceriornis satyra, the Sikkim horned pheasant (Jerdon III., 516). From 9,000 feet to snow line.

808. Pucrasia macrolopha, the koklás pheasant (Jerdon III., 524). 6,000 to 10,000 feet ; not rare.

809. Phasianus wallichii, the chír pheasant (Jerdon III., 527). 5,000 to 10,000 feet ; scarce.

810. Euplocomus albocristatus, the white-crested kalij pheasant (Jerdon III., 532). Up to 4,000 feet ; common.

812. Gallus ferrugineus, the red jungle fowl (Jerdon III., 536). The Dúns and warm valleys.

816. Tetraogallus himalayensis, the Himálayan snowcock (Jerdon III, 549). At great elevations.

817. Lerwa nivicola, the snow partridge (Jerdon III., 555). Near the snow line.

818. Francolinus vulgaris, the black partridge (Jerdon III., 558). Up to 5,000 feet; common.

820. Caccabis chukor, the chukor (Jerdon III., 564). 6,000 to 9,000 feet; not common.

822. Ortygornis ponticeriana, the grey partridge (Jerdon III, 569). In the Dúns only; common.

823. Ortygornis gularis, the kyah partridge (Jerdon III., 572). Kumaon Tarai; rare.

823. (*bis*) Perdix hodgsoniæ, Mrs. Hodgson's partridge (S. F. VII., 432). Above 17,000 feet; very rare.

824. Arboricola torqueolus, the black-throated hill partridge (Jerdon III., 577). 4,000 to 9,000 feet; common.

825. Arboricola rufogularis, the rufous-throated hill partridge (Jerdon III., 578). Kumaon only; rare.

826. Perdicula asiatica, the jungle bush-quail (Jerdon III., 581). The Dúns and warm valleys.

829. Coturnix communis, the corn quail (Jerdon III, 586). Up to 4,000 feet; common.

830. Coturnix coromandelica, the rain quail (Jerdon III., 588). The Dúns only; common.

831. Excalfatoria chinensis, the blue-throated quail (Jerdon III., 591). The Dúns only; rare.

832. Turnix taigoor, the black-breasted bustard quail (Jerdon III, 595). The Dúns; common.

834. Turnix joudera, the larger button quail (Jerdon III., 599). Kumaon; lower hills.

835. Turnix dussumieri, the button quail (Jerdon III, 600). The Dehra Dún only; not common.

838. Sypheotides bengalensis, the florikin (Jerdon III., 616). The Dúns only; not rare.

839. Sypheotides aurita, the lesser florikin (Jerdon III., 619). The Dúns only; rare.

843. Glareola lactea, the small swallow plover (Jerdon III., 632). The Dúns only; not common.

849. Ægialitis curonica, the Indian ringed plover (Jerdon III., 640). The Dúns only; rare.

852 Chettusia gregaria, the black-sided lapwing (Jerdon III., 644). Rare; migratory.

853. Chettusia leucura, the white-tailed lapwing (Jerdon III., 646). The Dúns; rare; migratory.

855. Lobivanelus indicus, the red wattled lapwing (Jerdon III., 648). Up to 4,000 feet; common.

856. Sarciophorus bilobus, the yellow wattled lapwing (Jerdon III., 649). The Dúns; a rare straggler.

857. Hoplopterus ventralis, the spur-winged lapwing (Jerdon III., 650). By the big rivers.

858. Esacus recurvirostris, the great stone-plover (Jerdon III., 652). The Dúns; a rare straggler.

859. Œdicnemus crepitans, the stone-plover (Jerdon III. 654). The Dúns only; not common.

864. Grus leucogeranus, the large white crane (Jerdon III., 663). Migrating; a rare straggler.

865. Grus cinerea, the common crane (Jerdon III., 664). An occasional cold-weather migrant.

866. Anthropoides virgo, the demoiselle crane (Jerdon III., 666). An occasional cold-weather migrant,

867. Scolopax rusticola, the woodcock (Jerdon III., 670). Up to 12,000 feet; not common.

868. Gallinago nemoricola, the wood snipe (Jerdon III., 672). The Dúns; not common.

869. Gallinago solitaria, the Himálayan solitary snipe (Jerdon III., 673). Up to 12,000 feet; rare.

871. Gallinago scolopacinus, the common snipe (Jerdon III., 674). The Dúns; common in winter.

872. Gallinago gallinula, the jack snipe (Jerdon III., 676). the Dúns; common in winter.

873. Rhynchæa bengalensis, the painted snipe (Jerdon III., 677). The Dúns only; not rare.

879 Ibidorhynchus struthersii, the red-billed curlew (Jerdon III., 685). In the interior; rare.

880. Machetes pugnax, the ruff (Jerdon III., 687). The Dúns only; in the winter.

884. Tringa minita, the little stint (Jerdon III., 690). In the Dúns in winter; occasionally.

885. Tringa temminckii, the white tailed stint (Jerdon III., 691). In the Dúns, in winter; occasionally.

891. Actitis glareola, the spotted sandpiper (Jerdon III., 697). In the Duns in winter; occasionally.

892. Actitis ochropus, the green sandpiper (Jerdon III., 698). An occasional migrant.

893. Actitis hypoleucos, the common sandpiper (Jerdon III., 699). Along the shores of rivers.

894. Totanus glottis, the greenshanks (Jerdon III, 700). An occasional migrant.

895. Totanus stagnatilis, the little greenshanks (Jerdon III., 701). A rare migrant.

896. Totanus fuscus, the spotted redshanks (Jerdon III., 702). A rare migrant.

897. Totanus calidris, the redshanks (Jerdon III. 702). A rare migrant.

898. Himantopus candidus, the stilt (Jerdon III., 704). A rare migrant in the Dúns.

900 Metopidus indicus, the bronze-winged jacana (Jerdon III, 708). The Kumaun Tarái and Dúns.

901. Hydrophasianus chirurgus, the pheasant-tailed jacana (Jerdon III., 709). The Dúns and warm valleys.

903. Fulica atra, the baldcoot (Jerdon III., 715). The Dúns and warm valleys.

905. Gallinula chloropus, the water-hen (Jerdon III., 718). Up to 6,000 feet; common.

907. Erythra phœnicura, the white-breasted water-hen (Jerdon III., 720). In the Dúns; common.

908. Porzana akool, the brown rail (Jerdon III., 722). The Dúns; rather rare.

910. Porzana bailloni, Baillon's crake (Jerdon III., 723). Up to 5,000 feet; not common.

911. Porzana fusca, the ruddy rail (Jerdon III., 724). Bhím Tál; rare.

916. Leptoptilus javanicus, the hair-crested stork (Jerdon III., 732). The Dúns only; rare.

917. Myeteria australis, the black-necked stork (Jerdon III., 734). The Dúns only; rare.

918. Ciconia nigra, the black stork (Jerdon III., 735). The Dúns only; rare.

919. Ciconia alba, the white stork (Jerdon III, 736). The Dúns only; rare.

920. Ciconia episcopa, the white-necked stork (Jerdon III., 737). The Dúns only; rare.

923. Ardea cinerea, the blue heron (Jerdon III., 741). The Dúns and lower hills; rare.

924. Ardea purpurea, the purple heron (Jerdon III., 743). The Dúns only; rare.

925. Herodias alba, the large egret (Jerdon III., 744). The Dúns only; rare.

926. Herodias intermedia, the smaller egret (Jerdon III., 746). The Dúns only.

927. Herodias garzetta, the little egret (Jerdon III., 746). The Dúns only; rare.

929. Buphus coromandus, the cattle egret (Jerdon III., 749). The Dúns only.

930. Ardeola grayi, the pond heron (Jerdon III., 751). The Dúns only; common.

931. Butorides javanica, the little green heron (Jerdon III., 752). The Dúns only.

933. Ardetta cinnamomea, the chestnut bittern (Jerdon III., 755). Bhím Tál; common.

936. Botaurus stellaris, the bittern (Jerdon III., 757) The Dúns only; rare.

937. Nycticorax griseus, the night heron (Jerdon III., 758). The Dúns and warm valleys; rare.

938. Tantalus leucocephalus, the pelican ibis (Jerdon III., 761). The Dúns only; rare,

941. Threskiornis melanocephalus, the white ibis (Jerdon III., 768). The Dúns only; rare.

942. Geronticus papillosus, the black ibis (Jerdon III., 769). The Dúns only; rare.

945. Anser cinereus, the grayleg goose (Jerdon III., 779). Migratory; not common.

949. Anser indicus, the barred-headed goose (Jerdon III., 782). An occasional migrant.

950. Sarkidiornis melanotus, the black-backed goose (Jerdon III., 785). The Dúns only.

951. Nettapus coromandelianus, the cotton teal (Jerdon III., 786). The Dúns only.

952. Dendrocygna javanica, the whistling teal (Jerdon III., 789). The Dúns only.

953. Dendrocygna fulva, the large whistling teal (Jerdon III., 790). A straggler from the east.

954. Casarca rutila, the ruddy sheldrake (Jerdon III., 791) An occasional migrant

957. Spatula clypeata, the shoveller (Jerdon III., 796). A cold weather migrant.

958. Anas boschas, the mallard (Jerdon III., 798). An occasional migrant.

959. Anas pœcilorhyncha, the spotted-billed duck (Jerdon III., 799). The Dúns only.

961. Chaulelasmus streperus, the gadwall (Jerdon III., 802). An occasional migrant.

962. Dafila acuta, the pin-tailed duck (Jerdon III., 803). An occasional migrant.

964. Querquedula crecca, the common teal (Jerdon III., 806). A regular migrant.

965. Querquedula circia, the blue-winged teal (Jerdon III., 807). A regular migrant.

967. Branta rufina, the red-crested pochard (Jerdon III., 811). An occasional migrant.

968. Fuligula ferina, the red-headed pochard (Jerdon III., 812). A rare migrant.

969. Fuligula nyroca, the white-eyed duck (Jerdon III., 813). An occasional migrant.

972. Mergus merganser, the merganser (Jerdon III., 817). On the large rivers; common.

974. Podiceps cristatus, the crested grebe (Jerdon III., 821). A rare straggler from the east.

975. Podiceps minor, the little grebe (Jerdon III., 822). Up to 4,000 feet; common.

985. Sterna seena, the large river tern (Jerdon III., 836). The Dúns only; rare.

987. Sterna javanica, the black-bellied tern (Jerdon III., 840). The Dúns only; not common.

1003. Pelecanus javanicus, the lesser white pelican (Jerdon III., 857). An occasional migrant.

1004. Pelecanus philippensis, the grey pelican (Jerdon III., 858). An occasional migrant.

1005. Graculus carbo, the large cormorant (Jerdon III., 861). On the large rivers; common.

1007. Graculus javanicus, the little cormorant (Jerdon III., 863). The Dúns only; not rare.

1008. Plotus melanogaster, the Indian snake-bird (Jerdon III., 865). The Dúns only.

References.

Jerdon—Birds of India. Calcutta, 1862.: Illustrations of Indian Ornithology. Madras, 1847.

Hodgson's papers.

Notices of the ornithology of Nepal. As. Res. XIX. 1, 143: J. A. S. Ben., V., 358, 707: XXIV., 572.

The bearded vulture of the Himálaya. *Ibid.*, IV., 454.

On the red-billed Erolia. *Ibid.*, IV., 458, 701.

A new species of *Columba*. V., 122.

A new genus of *Meropidæ*. V., 360.

On a new piscatory genus of the Strigine family. V., 363.

A new genus of *Picadæ* and new species of *Sitta*. V., 778.

New species of *Hirundidinæ*. V., 779.

Three new genera of Thrushes. VI., 101.

Three new species of Woodpecker. VI., 104.

A new genus of Inscssorial birds. VI., 110.

A new genus of *Sylviadæ*. VI., 230.

On some new genera of *Raptores*. VI., 361.

New species of Indian snipe. VI., 489.

A new species of pheasant from Tibet. VII., 863.

A new genus of the fissirostral tribe. VIII., 35.

New species of Meruline birds. VIII., 37.

On the cuckoo tribe. VIII., 136.

New form of *Glaucopenna* or rasorial crows. X., 856.

New species and genus of *Falconidæ*. V., 227: XII., 127.

Catalogue of Nepalese birds presented to the Asiatic Society, Calcutta. XII. 301 : XXIV., 572.

On the Leiotrichane birds of the Sub-Himálaya. XIII., 933.

A new Perdicine bird from Tibet. XXV., 165.

Characters of new species of Nepalese birds. An. Mag. N. H. N. S., XV., 326.

Blyth's papers.

A list of these will be found in the extra number of Vol. XLIV., Part II., of the Journal of the Asiatic Society, Calcutta, 1875.

Hume, A. O. Stray Feathers. 1873, *et seq.* Calcutta: ornithological notes, J. A. S. Ben. XXXIX., ii. 113: and C. Marshall, the Game Birds of India. Calcutta, 1880.

Brooks, W. E.—On a species of *Lophophanes*, J. A. S. Ben., XLII., ii., 57. On certain eagles, *Ibid.*, 145. On Indian *Certhiinæ*, *Ibid.*, 255. Supplemental notes, *Ibid.* XLIII. ii. 239. List of birds observed near Naini Tal and Almora, Ibis. V. N. S., 43.

McMaster, A.—Notes on the birds of Nágpur, J. A. S. Ben. XL., ii., 207.

Stoliczka.—Ornithological observations in the Satlaj valley. *Ibid.*, XXXVII., ii., 1. A contribution to Malayan ornithology. *Ibid.*, XXXIX., ii, 277. On the birds and mammals of Kachh. *Ibid.*, XLI., ii., 211.

Blanford, W.—Ornithological notes. *Ibid.*, XXXVIII., ii., 125. Notes on the birds of Nágpur, Akola and Chanda in the Central Provinces. *Ibid.*, XL., ii., 216, 268. On the birds of Sikkim. *Ibid.*, XL., ii., 367: XLI., ii, 30, 152. On *Ruticilla schisticeps*, Hodgson. *Ibid.*, XLVII. ii., 1. On a species of *Trochalopterum*. *Ibid.* XLIX. ii. 142.

Godwin-Austen.—Birds of the eastern Himálaya. *Ibid.* XXXIX. 95, 264: XLI. ii., 142: XLIII. ii., 151: XLV. ii., 191: XLVII. ii., 12. Birds of the Daphla hills and Darang Tarái. *Ibid.* XLV. ii., 64. On new species of birds from the Nága, Khasiya and Daphla hills and Asám. *Ibid.* XLVI. ii., 41: An. Mag. N. H. 4th Ser. XIII, 160: XVI. 339: XVII. 32: XVIII. 411: XX. 519.

Walden.—Descriptions of new species of Asiatic birds. An. Mag. N. H, 4th Ser. VII., 241: IX., 47: X., 61: XIV., 156: XV., 400: XVI., 228 and XX.. 94.

Swinhoe, R.—On new species of Asiatic birds. *Ibid.*, 4th Ser. VII., 257.

REPTILES.

Reptiles are vertebrate animals that breathe by lungs and are cold-blooded and for the most part oviparous. They include frogs, toads, lizards, chameleons, salamanders, tortoises, turtles and serpents and are very widely and commonly distributed throughout India. When Dr. Günther wrote his great work (1864) on Indian reptiles, 282 species of snakes were recorded from India including British Burma, of which 79 species were venomous, but of the latter 44 were marine snakes (*Hydrophidæ*) and of the remainder 17 were arboreal species,

Reptiles.

reducing the venomous terrestrial snakes to 18, of which only six are at all common. Theobald in his "Catalogue of the reptiles of British India," published in 1876, omits the marine snakes and describes 188 species, of which only 33 are venomous. The following list only includes species actually collected by Dr. Watson in Kumaon and of the 23 recorded, eight are venomous, a proportion not found in the plains of India. A reference is given under each species to Theobald's work, where a description will be found.

REPTILIA.

Order SAURIA or Land Lizards.

Group *Leptoglossæ*.

Varanus Dracœna, Linn.: common water lizard, attains to four feet in length, brownish olive colour, dotted with black scales: common near rivers. Th. 38.

Mocoa himalayana, Günth.: four inches long, of which tail is half: colour above greenish olive, with a few interrupted series of dark and whitish dots; a dark lateral band from nose through eyes, margined above with white: common. Th. 57.

Mocoa sacra, Stol.: body 1·37, tail 2 inches: colour light bronze brown, with a few dark brown spots accompanied by one or two indistinct pale spots scattered on head and body: very common. Th. 57.

Group *Pachyglossæ*.

Hemidactylus maculatus, D. *et* B.: length 5½ inches: colour brownish olive or dark brown above, with darker spots, bands or streaks: occurs at low levels. Th. 75.

Gymnodactylus Lawderanus, Stol.: length about 4 inches: colour greenish brown, densely marbled and spotted with dark brown: rare, occurs in Almora. Th. 81.

Sitana pondiceriana, Cuv.: about 5½ inches, fawn-coloured with rhomboidal dark spots on the back and a pale yellowish streak from below the eye through the ear to the loins: frequent. Th. 102.

Calotes versicolor, Daud.: the blood-sucker; grows 14 to 16 inches; in summer, the males have the body red, head and neck yellowish picked out with red: very common up to 4,000 feet. Th. 109.

Stellio tuberculatus, Gray: body 5 and tail 8½ inches: colour dark olive: very common up to 5,000 feet. Th. 116.

Stellio melanurus, Blyth: body 3·7 and tail 7·7 inches: colour olive grey: somewhat rare. Th. 117.

Stellio Dayanus, Stol.: body 6 and tail 12 inches: colour in adults blackish: found in the Bhábar. Th. 117.

Order OPHIDIA or Snakes.

Group 1.—*Harmless colubrine snakes.*

Typhlops bothriorhynchus, Günth.: grows to 11 inches; brown above and below or with the terminal half of scales slightly paler: occurs in Bhábar. Th. 122.

Typhlops tenuicollis, Peters: colour olive, browner above, yellowish below: Bhábar. Th. 123.

Typhlops porrectus, Stol.: grows to 11 inches: colour above pale chocolate or leaden brown above shading into paler below: Bhábar. Th. 124.

Simotes Russellii, Daud.: grows to 27 inches: colour brownish olive with three dark arrow-shaped bands on the head very distinct and body crossed with about twenty white-edged black bars: belly yellow: very common on grassy slopes. Th. 150.

Simotes punctulatus, Günth.: grows to 36 inches: colour brown either crossed by numerous straight light, black edged bands, about two scales broad or crossed by irregular lines formed by the black edges of some scales or with some twenty-two pairs of pale black-edged spots down the back, more or less confluent: rare. Th. 152.

Ablabes tenuiceps, Blyth: grows to 14 inches: colour above uniform blackish ash, below whitish: frequent. Th. 154.

Ablabes Rappii, Günth.: grows to 23 inches: colour uniform dark bronze brown or blackish above, whitish below: common. Th. 154.

Ablabes collaris, Gray: grows to 32 inches: colour brown above, white below with black dots; a black collar yellow margined behind on the nape sometimes with a number of black dots: common. Th. 156.

Compsosoma semifasciatum, Blyth: colour above pale olive grey transversely dark barred and spotted; a horse-shoe mark with the

ends directed backwards on the occipitals ; a pale, elongate, lateral ocellus on each occipital : belly whitish or with a slight dusky tinge: common. Th. 164.

Compsosoma Hodgsonii, Günth.: grows to 63½ inches : colour uniform brownish olive : skin and margin of some scales black ; lower parts yellowish : common. Th. 166.

Ptyas mucosus, Linn.: the rat-snake or *dhâman* of the plains ; grows to 91 inches ; colour light brownish olive ; scales with dusky margins producing a reticulated appearance on the hind part of the body and the pointed tail : very common. This with *S. Russellii* comprise nineteen-twentieths of all the snakes killed in the hills. Th. 168.

Tropidonotus platyceps, Blyth : grows to 30 inches : colour in males above, dark brown, with a long elliptical mark on the neck and two rows of small blackish spots along the back anteriorly : below yellowish finely mottled with dusky green and a distinct blackish band on each side : a coral red band along the ends of the ventrals : common on ground under trees. Th. 174.

Psammophis condanarus, Merr.: grows to 40 inches : colour buff or yellowish : isabelline brown with a dark stripe, two broad scales down either side of the back from head to tail and a broader dark stripe on either side of the belly which is yellowish : common. Th. 187.

Lycodon striatus, Shaw : brown or black barred with yellow, the bars being broken up on the sides and a bright yellow collar on the neck : grows to about 20 inches ; frequent. Th. 199.

Python molurus, Linn.: *ajgar*, *charáo* in Kumaun ; grows to about 30 feet, but specimens over 20 feet are rare ; have seen one of 25 feet killed in the Eastern Dún of Dehra ; coloration like the *Daboia*, but several shields on the head and scales in 65 rows round the middle of the body : common up to 5,000 feet : seen in Bhabar, at Ukhimath and below Túngnáth. Th. 206.

Group 2.—*Venomous colubrine snakes.*

Naja tripudians, Merr.: cobra, known as *kobra*, *nág*, *kála-samp*, *phanwala* ; grows to 70 inches and is very common in the hills. Neck dilatable into a hood ; scales smooth in 15 rows on the body,

but more numerous on the neck : nostril between two shields. Colour very variable from pale yellowish to pale and dark brown and black. The spectacle marks on the hood also vary in development and are sometimes replaced by a pale oval eye-shaped mark with a dark centre. Th. 208.

Naja Elaps, Schl.: the *ashuriya* of the plains ; grows up to 200 inches, has been identified from Pithoragarh and Káladhúngi and occurs also in the eastern Bhábar. It is difficult to distinguish between young specimens and the cobra ; they are, however, of a pure jet black. The adult female is olive brown with paler cross bands deeply edged with black : beneath white mottled with black about the tail ; throat yellow. Th. 209.

Callophis MacClellandii, Reinh.: grows to about 30 inches and is rare in Kumaon. Body and tail reddish brown with generally a black vertebral line from the nape to the tip of the tail : head and neck black, with a yellow bar behind the eyes ; belly yellowish with black cross bands or quadrangular spots. Sometimes the belly bars are alternately short and long, giving the appearance of a chain of supra-abdominal spots. Tail black ringed or sometimes without rings and belly only spotted and sometimes the vertebral line is absent and the body encircled with black rings. Th. 214.

Bungarus cæruleus, Schn.: the *karait* of the plains and here frequent in the valleys. Colour above deep lustrous blue-black uniform or streaked and reticulated with white ; below white ; grows to 54 inches. Compared with the cobra it is a sluggish snake and does not possess a hood but like most snakes, however, it has the power, when irritated of compressing laterally the anterior six inches of its body. Th. 215.

Group 3.—*Venomous viperine snakes.*

Daboia Russellii, Shaw : grows to 54 inches and is common in the hills. Colour above greyish or reddish brown with three rows of blackish-brown annular ocelli each surrounded by an inner white and an outer black ring down the back and sides : the vertebral series ovate, the others circular and sometimes with supplementary ocelli of small size interspersed below between the others. A broad arrow mark on the head formed by two pale lines from the snout over the eyes to the temporal region. Rostral and labials yellowish

with brown margins. Belly yellowish or marbled with brown. Th. 217.

Group 4.—*Venomous pitted vipers.*

Trimesurus carinatus, Gray : colour above uniform grass green paler below or whitish : tail yellowish or rusty : grows to 37 inches This is one of the handsomest of the arboreal species and is frequent in the hills, Siwáliks and Bhábar. It is easily recognised by its head being much thicker than its neck or body. Th. 221.

Trimesurus monticola, Gray : colour in males blackish ash, in females and young pale brown. Two rows of square black spots along the back, alternately placed or confluent : sides black or brown spotted : a yellow or white streak from the eye to the neck with a Y-like mark on the neck : belly densely marbled brown : grows to 21 inches : rare, occurs in valleys. Th. 220.

Halys himalayanus, Günth.: colour dark brown, indistinctly spotted with darker spots transverse, edged with black : belly black, marbled with yellowish : a blackish band from the eye to the gape : grows to 25 inches : very common above 10,000 feet : found on Binsar. Th. 225.

REFERENCES.

Russell, P.—An account of Indian serpents collected on the coast of Coromandel. London, 1796.

Cantor.—Spicelegium serpentorum indicorum. Cal. J. N. H. I., 76: a new hooded serpent, As. Res. XIX, 87: reptiles of the Malayan peninsula and adjacent islands, J. A. S Ben. XVI., 607, 897, 1026.

Catalogue of reptiles inhabiting the Indian Peninsula. *Ibid.*, XXII., 462, 521.

Tytler, Col.—Observations on a few Geckos. *Ibid.*, XXXIV., ii., 535.

Carlleyle, A.—Two new species of reptiles. *Ibid.*, XXXVIII., ii., 192.

Theobald, W.—Catalogue of the reptiles in the Museum of the Asiatic Society, Calcutta. Extra number, 1868. Descriptive catalogue of the reptiles of British India. Calcutta, 1876.

Nicholson, E.—Indian snakes Madras, 1874.

Fayrer, J.—The Thanatophidia of India. London, 1874.

Stoliczka.—Notes on Indian and Malayan reptiles. J. A. S. Ben. XXXIX., ii., 134, 157: on Indian and Burmese ophidians, *Ibid*, XL., ii., 421: on new or little known Lizards, *Ibid.*, XLI, ii., 86, 177.

Blanford, W.—Notes on some reptilia and amphibia, *Ibid.*, XXXIX., ii., 335: notes on certain snakes, *Ibid.*, XLIV, ii, 207: on some lizards from Sind *Ibid.*, XLV., ii, 18: on reptilia from the Himálaya, *Ibid.*, XLVII, ii., 125: on certain reptiles and frogs, *Ibid*, XLVIII, ii., 110: on reptiles from Ajmere,

Ibid, XLVIII, ii., 119, 127: on reptilia from Persia, An. Mag. N. H.4th Ser, XIV., 31.

Anderson, J.—List of reptilian accessions to the museum of the Asiatic Society, Calcutta, J. A. S. Beng, XL., ii, 12 Note on *Trionyx Phayrei* by W. Theobald and Dr Anderson, in An. Mag. N. H 4th Ser., VIII., 83, 324: Stoliczka, VIII., 212: Gray, VIII., 320: Anderson, IX., 382, X., 219: Gray, IX., 473: X., 218, 326.

FISHES.

Fishes.

Fishes form the fourth division of the Vertebratæ. Like the mammals, birds and reptiles, they possess a vertebra, but they are cold-blooded and breathe by means of gills. The body may be divided into the head, trunk and tail and is provided with fins which according to their position are called pectoral, ventral, anal, caudal, adipose, and dorsal fins. For the fishes of India we fortunately possess Day's great work which will enable the local student at once to distinguish his captures. The following list is extracted from Dr. Day's articles[1] on the "Geographical distribution of Indian fresh-water fishes" and gives a reference to the description of each species in his 'Fishes of India.' There are sixteen families comprising eighty-seven genera of fresh-water fishes found in India and Burma. Of these two only are common to Africa and India only (not being Malayan) both being likewise Palæarctic: 32 extend to the islands of the Malayan archipelago and 12 are common to the Indian, African and Malayan regions, of which six are likewise Palæarctic. Further, if the 369 species comprised in the Indian genera be taken, two only are African and not Malayan, but they are also Palæarctic: 27 are common to India and the Malayan archipelago and two to India, Africa and the Malayan region. In the Himálaya there are two great classes, the Tartarian fauna from the Palæarctic regions and the Hindustan forms and amongst the latter, the hill Barbels have a well-marked distinct position. Altogether the Himálayan region contains recorded representatives of some eighteen genera, but much still remains to be done by local workers in accurately recording the distribution of species. Every one knows the bewildering mass of vernacular names for fishes that obtain in every district, but a careful study of Day will enable the naturalist with a fresh specimen

[1] Journ. Linn. Soc., XIII., 138, 338: XIV., 534, 1878-79: from which the facts as to distribution are taken: see also "Fishes of Yárkand," Progs. Zol. Soc., 1876, p. 781.

before him to determine the names of the following amongst others that are said to occur in the Kumaun Division :—*selo, balâyan, kalonji, gulyál, gadhúla, nái, bain, gadera, bakulo, kanaluwa, kotuwa, jyábu, pharkato, mingaro, unera, bhagtera, sanero, damaruwa, aro, balsulo, dudhilo, gauro, bhegi, saulya, kano, gálar, káli-karnál, kargato, paparuwa, chílaluwa* and the dry-fish known as *ashiála.*

Some of these fishes are found in shallow pools near the sources of the great rivers and such are provided with a transverse inferior mouth and a sucker behind the lower jaw with which they attach themselves to the rocks in order to resist the force of the current. The cold in winter in these elevated regions is intense and in the southern tract abutting on the plains the waters are ever warm. In the Tarái, the Bhuksas and the Thárus catch fish chiefly for their own consumption and in the hills the Doms are the principal fishermen. All classes in the hills except a few Brahmans and Baniyas eat fish at all times. No sustained and systematic efforts have ever been made to protect fish from poachers and the wanton destruction of fry and mature fish goes on almost unchecked. In the tract along the foot of the hills between the Sárda and the Ganges, nets with meshes $\frac{1}{4}$-$\frac{3}{4}$″ are used and the great fishing season takes place in the cold weather. In the hills spearing fish by torch-light is sometimes resorted to and in Garhwál they are often snared in nooses made of white horse-hair which are attached to a line strechedacross a river and near each group of nooses, a brightly-coloured flower or piece of cloth is fastened. The line is kept in its position by a leaden weight and the curious fish attracted by the novel object presented to them come swimming around it and are easily entangled in the nooses.

The Superintendent of Dehra Dún reported on the state of fish-conservancy in his district in the following terms and there is reason to believe that what was written in 1871 is true of 1881 :—

"Breeding fish are destroyed in great numbers and the small fry are also largely captured. The former are taken in the commencement of the rains in every conceivable manner. At that time, they run up small streams and are then killed with sticks, are caught in nets, in baskets, by hooks fastened on lines and in many other ways. Small fry are taken at the end of the rains in baskets placed in fields at the outlets for irrigation-water and in the cold-weather

they are captured wholesale in small-meshed nets. From the month of March up to the beginning of the rains, streams are dammed and turned. In the districts along the foot of the hills the mountain torrents, when they burst from the hills, have three or four different beds, all of which are full during the rains, but afterwards only one. One year the stream is in one of these beds and another year in another. The poachers choose a spot where the stream and an old bed are in close proximity and both have good pools in them. They then fix nets right across the stream about a mile, or more, below this spot : first, nets with large meshes, and then nets with smaller meshes which are kept in position by heavy stones placed on their lower edge and floats above. When the nets are all ready the operators dam up the stream, and open a water-way into the old bed, so that the force of the water soon cuts a deep way for itself, and then the late bed of the stream is left dry, except in the deep holes. All fish that try to escape down are stopped by the nets. The poachers then take away all the fish they want, and leave the rest to perish gradually as the pools dry up. Small fry may sometimes be seen lying dead, six and eight inches deep, in these holes. The poachers, in a day or two, go through the same process somewhere else lower down, and after a month or so when the fish have become accustomed to the new bed, they commence at the top again, and return the stream into its late bed, catching all the fish in the new bed.[1] This is one of the most deadly modes of poaching, but, in addition to this process during the same period, the poachers are in the habit of using nets of very small meshes, with which they catch the young fry of the larger kinds of fish where damming the stream is impracticable."

Some improvement has of late been effected in Dehra Dún with the co-operation of the landholders by limiting the size of the mesh in common use to one and a half inch between knot and knot ; by prohibiting the sale of young fry in the markets and by establishing a close season during the first two months of the rains, but it is found that something more than private influence is required to check the wasteful use of this great food resource. In the hills some action should be taken to protect the *mahâser*. This fish so good for food and sport commences to run up the smaller streams

[1] See further Day's official report on Indian fisheries.

about the end of March or beginning of April, and in June-July large specimens weighing ten to fifteen pounds may be seen in little streams not more than a few yards wide. These are all heavy with spawn and fall easy victims to the poacher. Where the streams narrow and run between rocks, the Doms fasten a series of strings with sharp strong barbed hooks every three inches to the rocks on each side and in this way secure a vast number of the larger fish. In the hills also the poisoning of pools with various vegetable drugs is a common practice and could easily be discouraged. The portions of plants more commonly used for this purpose are the bark of *Zanthoxylon hostile*, Wall., the *timúr* and *tejbal* of Kumaon, common throughout the hills: the fruit of *Casearia tomentosa*, Roxb., the *chíla* of the Siwálik tract and *Anagallis arvensis*, Linn., the *jonkhmára* and *jaighani* of Kumaon, of which the whole plant triturated is used to poison fish or to expel leeches from the nostrils hence its vernacular name. It is plausibly stated that fish are not such a common article of food as to need conservation, but it is precisely for this reason that they should be protected. Fish are universally eaten by the casteless classes that form the majority of the population and who are also the first to suffer in times of scarcity. It is not so necessary to protect the food-resources of the rich and powerful as to conserve those which might be made available for the poor labouring man and his family when famine is abroad. I would, therefore, strongly urge the prohibition of poaching and the introduction of a close season for the carp tribe: in fact the introduction of Ross' Dún rules by legislative enactment.

PISCES.

ORDER PHYSOSTOMI.

Family—SILURIDÆ.

Silurus Afghana, Günth. Day, 481. Procured from Afghánistán, Kashmír, Darjiling.

Amblyceps Mangois, Buch. Day, 490. Procured from Kangra and Darjiling and found in the upper Jumna.

Bagarius Yarrellii, Buch. Day, 495. The *gúnch* found near Hardwár and called the fresh-water shark. It attains a length of six feet or more.

Glyptosternum Lonab, Sykes. Day, 496. Procured in the head-waters of the Jumna.

Glyptosternum trilineatum, Blyth. Day, 497. Procured from Nepál.

Glyptosternum conirostre, Stein. Day, 497. Himálayan streams.

Glyptosternum Botia, Buch. Day, 497. A mountain stream species found in the upper Jumna.

Glyptosternum pectinopterum, Day, 499. Found in the Himálaya from Kangra to Darjiling.

Euglyptosternum lineatum, Day, 500. Found in the upper Jumna.

Family.—CYPRINIDÆ. Carps.

Homaloptera maculata, Gray. Day, 525. Found in the Himálaya, also in the Wynád and Bhawáni rivers, Madras.

Discognathus Lamta, Buch. Day, 527. *Pathar-chata*, common in the great rivers having their origin in the hills; taken in Chamba in the Himálaya.

Oreinus sinuatus, Heckel. Day, 529. Occurs in the rivers within the hills and attaches itself by a sucker to the rocks and boulders and thus resists the action of the current. The species of this genus with *Schizopygopsis*, *Schizothorax*, *Ptycobarbus*, and *Diptychus* are strictly residents of the hilly regions of the Himálaya, though a few descend to the plains. The genus Oreinus extends from Afghánistán along the Himálaya to the frontiers of China. They also descend a short distance into the rivers of the plains and are absent from the level plateaus on the summit of the Himálaya.

Oreinus Richardsonii, Gray. Day, 530. This is the so-called mountain-trout of Kumaon, of which a figure is given by McClelland in J. A. S., Ben., IV., 39.

Oreinus plagiostomus, Heckel. Day, 530. This species occurs throughout the Himálaya from Afghánistán to Bhután.

Schizopygopsis Stoliczkæ, Steind. Day, 531. Found in the cold waters of the Himálaya about the source of the Indus, Tibet;

where the rivers are snow-fed and many of them never reach the sea.

Schizothorax progastus, McClell. Day, 532. The *dindwa* of these Provinces : occurs from the head-waters of the Ganges eastwards.

Schizothorax esocinus, Heckel. Day, 533. Procured in Kashmír and Ladák.

Ptycobarbus conirostris, Steind. Day, 533. Procured in the head-waters of the Indus and Tibet.

Diptychus maculatus, Steind. Day, 534. Procured in the head-waters of the Indus and Yárkand rivers, Tibet and Nepál.

Labeo diplostomus, Heckel. Day, 540. The *muheli* of Hardwár occurs in the Himálayan rivers from the Panjáb to Asám, including the rivers at their bases.

Labeo dyocheilus, M'Clell. Day, 540. The *buwála* of these Provinces : occurs in the same localities as the preceding.

Labeo Pangusia, Buch. Day, 541. Occurs throughout the Himálayan range and descends to the delta of the Ganges.

Labeo microphthalmus, Day, 542. Occurs in the Himálaya.

Labeo sindensis, Day, 544. Occurs at Hardwár.

Cirrhina Latia, Buch. Day, 548. Occurs along the Himálaya in the hill rivers.

Barbus chilinoides, M'Clell. Day, 563. Occurs throughout the Himálaya as far east as Asám and descends into the Ganges.

Barbus Tor, Buch. Day, 564. Occurs throughout the hill rivers : the *maháser* of fishermen.

Barbus hexastichus, M'Clell. Day, 565. Occurs commonly in all rivers on and around the Himálaya.

Apidoparia Jaya, Buch. Day, 585. The *pahruwá* of Hardwár : occurs also at Rájpur on the Jumna.

Barilius Vagra, Buch. Day, 589. Common in the rivers of the Himálayan and sub-Himálayan ranges. The fishes of the genus Barilius prefer rapid streams and frequently ascend the rivers of the hills.

Barilius Schacra, Buch. Day, 590. Procured from Hardwár.

Barilius Bendelisis, Buch. Day, 590. Found in the Himálayan rivers and also in the plains (except Sind and the Malabar coast) and Ceylon.

Danio æquipinnatus, M'Clell. Day, 596. Hitherto received only from the Himálayan rivers eastward of Nepál.

Danio Dangila, Buch. Day, 596. Procured in the hills near Darjiling and in the Gangetic delta.

Botia nebulosa, Blyth. Day, 606. Hitherto only from Darjiling.

Botia Dario Buch. Day, 606. Procured at Hardwár.

Botia Geto, Buch. Day, 606. Found from Sind through the Panjáb and Himálaya to Asám.

Botia almorhæ, Gray. Day, 607. Found in the Suál river below Almora, also in Kashmír.

Leptocephalichthys Guntea, Buch. Day, 609. From the Panjáb to Asám, including several of the Himálayan rivers.

Nemacheilus rupicola, M'Clell. Day, 616. Occurs in the rivers of the upper Himálaya and (?) Tibet at 16,000 feet above the level of the sea.

Nemacheilus montanus, M'Clell. Day, 616. Occurs throughout the Himálaya.

Nemacheilus zonatus, M'Clell. Day, 618. Occurs in the Jumna, Ganges and their affluents : taken in Dehra Dún.

Nemacheilus ladacensis. Günth. Day, 618. Tibet.

Nemacheilus spilopterus, Cuv. Day, 620. Recorded from the Himálaya.

Nemacheilus marmoratus, Heckel. Day, 620. Recorded from the Kashmír lake.

Nemacheilus Stoliczkæ, Steind. Day, 620. Taken in the Indus near Leh and in the Yárkand river.

Nemacheilus gracilis, Day. Day, 621. Taken in the headwaters of the Indus.

REFERENCES.

Hamilton-Buchanan—Fishes of the Ganges. Edinburgh, 1822.

Sykes—Fishes of the Dukhun. Trans. Zool. Soc., II., 349: Cal. J. N. H. I., 65.

Cantor—Catalogue of Malayan fishes. J. A. S. Ben., XVIII., 983.

Jerdon—Fishes of Southern India. J. L. S., Mad., XV., 139, 302.

M'Clelland—Indian Cyprinidæ, As Res., XIX., ii., 217: Fishes of Afghánistán, Cal. J. N. H., II., 560: Mountain trout of Kumaon, J. A. S., Ben., IV., 39: New species of Cyprinidæ, *Ibid.*, VII., 941: VIII., 650.

Blyth.—Fishes of Burma, *Ibid.*, XXIX., 166: Cartilaginous fishes of Bengal, *Ibid.*, XXIX, 35: Fishes obtained near Calcutta, *Ibid.*, XXVII., 267.

Beavan—Indian fresh-water fishes. London, 1876.

Day.—The Fishes of India, being a natural history of the fishes known to inhabit the seas and fresh-waters of India, Burma and Ceylon. London, 1876-78. This work supersedes all that have gone before.

CHAPTER II.

Zoology (*Invertebrata*).

CONTENTS.

Land and fresh-water shells. Arachnida. Insects. Coleoptera. Orthoptera. Hemiptera. Neuroptera. Lepidoptera. Hymenoptera. Diptera. Myriapoda.

MOLLUSCA.

Terrestrial and fluviatile shells.

The section of this order found in the Himálaya is confined to land and fresh-water shells. No special work on the hill species has yet been written, but they are incidentally noticed in the catalogues quoted amongst the references at foot. The animals of this class possess a head furnished with organs of touch and vision and sometimes of hearing. Some live on land, but most live in water and little has yet been done to describe the animals themselves apart from their shells. My thanks are due to Mr. W. Theobald for placing his lists at my disposal. I have again to repeat that these lists are neither exhaustive nor up to the present state of science, but are merely suggestive notes which will aid those who desire thoroughly to investigate the local fauna.

Class GASTEROPODA.

Family *Melaniidæ*.

Melania, *Lam.*—scabra, *Müll.* C. I. *t.* 73 ; *f.* 1-7 : tuberculata, *Müll.* C. I. *t.* 74 ; *f.* 1-4.

Family *Ampullaridæ*.

Ampullaria, *Lam.*—globosa, *Swain.* ; C. I., *t.* 113 ; *f.* 3-5. ?

Family *Viviparidæ*.

Vivipara, *Lam.*—bengalensis, *Lam.* ; C. I. *t.* 76. *f.* 8-10 : dissimilis, *Müll.* ; C. I., *t.* 100 ; *f.* 3, 4.

Family *Rissoidæ*.

Bithynia, *Lam.*—cerameopoma, *Benson* ; C. I. *t.* 38. *f.* 1, 4. ? : pulchella, *Benson* ; C. I. *t.* 38 ; *f.* 5, 6.

Tricula, *Benson*.—montana, *Benson* ; An. Mag. N. H. 1862, p. 415.

Family *Zonitidæ*

Macrochlamys, *Benson.*—chloroplax, *Benson;* C. I. *t.* 32 ; *f.* 1, 4, glauca, *Benson ;* C. I. *t.* 63 ; *f.* 10 : indica, *Benson ;* C. I. *t.* 87 ; . 7, 10 : splendens, *Hutton;* C. I. *t.* 51 ; *f.* 7, 10 : nuda, *Pf.* C. I. *t.* 31 ; *f.* 7, 10 : vesicula, *Benson ;* C. I. *t.* 63 ; *f.* 4-6 : ornatissima, *Benson;* C. I. *t.* 60 ; *f.* 4 : planiuscula, *Benson ;* C. I. *t.* 32 ; *f.* 7, 10 : prona *Nev.* Moll. Yark. Mis.

Sitala, *Adams.*—Bullula, *Hutton ;* C. I. *t.* 61 ; *f.* 2, 3 : Nana, *Hutton* ; C. I. *t.* 61 ; *f.* 7-9 : radicicola, *Benson ;* C. I. *t.* 62 ; *f.* 10.

Kaliella, *W. Blanf.*—barakporensis, *Pf.;* C. I. *t.* 87 ; *f.* 7 : fastigiata, *Hutton ;* C. I. *t.* 16 ; *f.* 5.

Hemiplecta, *Albers.*—monticola, *Hutton ;* C. I. *t.* 52 ; *f.* 3.

Ariophanta, *Desmo.*—cyclotrema, *Benson ;* C. I. *t.*, 28 ; *f.* 10.

Helicarion, *Ferussac.*—monticola, *Benson ;* Pf. Mon. II., 497 : scutella, *Benson ;* C. I. *t.* 66 ; *f.* 1, 4 : cassida, *Hutton ;* J. A. S. Bene., VII., 214 ; Flemingii, *Pf. ;* C. I. *t.* 66 ; *f.* 5, 6 : ovatus, *H. Blanf. ;* J. A. S. Ben. 1871, ii., 44.

Family *Helicidæ* : Snails.

Fruticola, *Hildreth.*—Huttoni, *Pf.*

Vallonia, *Risso.*—humilis, *Hutton ;* C. I. *t.* 61 ; *f.* 4-6.

Peronæus, *Albers.*—cænopictus, *Hutton.*

Napæus, *Albers.*—areuatus, *Hutton ;* C. I. *t.*, 20 ; *f.* 2, 7 : Boysianus, *Benson ;* C. I. *t.* 22 ; *f.* 6 : ceratinus, *Benson ;* C. I. *t.* 80 ; *f.* 2 : cælebs, *Benson ;* C. I. *t.* 80 ; *f.* 1 : fallaciosus, *Stol. ;* kunawarensis, *Hutton ;* C. I. *t.* 19 ; *f.* 3 : pretiosus, *Cantor ;* C. I. *t.* 23 ; *f.* 7 : rufistrigatus, *Benson ;* C. I. *t.* 20 ; *f.* 4 ; *t.* 23, *f.* 10 : segregatus, *Benson ;* C. I. *t.* 80 ; *f.* 10 : Smithii, *Benson ;* C. I. *t.* 20 ; *f.* 6 : vibex, *Hutton* ; C. I. *t.* 20 ; *f.*, 5 : *t.* 23, *f.* 2.

Opeas, *Albers.*—gracilis, *Hutton ; Pf.* ii., 157 : latebricola, *Benson ;* C. I *t.* 79, *f.* 7.

Glessula, *Albers.*—balanus, *Benson ;* Gl. in Sc. I. *t.* 8, *f.* 12 : iota, *Benson ;* leptospira, *Benson ;* C. I. *t.* 35, *f.* 2 ?

Cylindrus, *Fitz.*—insularis, *Eh. ;* C. I. *t.* 22, *f.* 10.

Pupa, *Drapar.*—eurina, *Benson ;* C. I. *t.* 101, *f.* 10 : orcula, *Benson ;* C. I. *t.* 87 ; *f.* 1, 4 : plicidens, *Benson ;* C. I. *t.* 100 ; *f.* 8 : tutula, *Benson ;* Conch. Icon, 625, *t.* 84.

Succinea, *Draper.*—Bensoni, *Pf.;* C. I. *t.*, 67; *f.* 9 : indica, *Pf.*, C. I. *t.* 67, *f.* 1, 4.

Clausilia, *Draper.*—cylindrica, *Gray;* C I. *t.* 24, *f.* 4.

Ennea, *Adams.*—bicolor, *Hutton;* C. I. *t.* 100, *f.* 6.

Order LIMNOPHILA.

Family *Auriculidæ.*

Carychium, *Müll.*—indicum, *Benson;* An. Mag. N. H., 1849, p. 194: Boysianum, *Benson, Ibid,* 1864, p. 210.

Coilostele, *Benson*—scalaris, *Benson;* An. Mag. N. H., 1864, p. 136.

Family *Limnæidæ*—Pond-shells.

Limnæa, *Lam.;* acuminata, *Lam.;* C. I. *t.* 69; *f.* 8, 9 : luteola, Lam.; C. I. *t.* 70, *f.* 5, 6.

Planorbis, Guett.—cænosus, *Ben.;* C. I. *t.* 39, *f.* 7-9: calathrus, *Ben.;* C. I. *t.* 39, *f.* 1-3 : compressus, *Ben.;* C. I. *t.* 99, *f.* 1, 4 : convexiusculus, *Hutton;* C. I. *t.* 99, *f.* 8-10 : exustus, *Desh.;* C. I. *t.* 39, *f.* 10; *t.* 40, *f.* 10 : labiatus, *Ben.;* J. A. S. Ben., 1850, p. 350: rotula, *Ben.;* C. I. *t.* 99, *f.* 2, 3.

Ancylus, *Geoff.*—verruca, *Ben.;* C. I. *t.* 81, *f.* 2, 3.

Order ECTOPHTHALMA.

Family *Cyclophoridæ.*

Cyclophorus, *Montfort*—exul, *Benson;* C. I. *t.* 47; *f.* 1.

Alycæus, *Gray*—strangulatus, *Hutton;* C. I. *t.* 93; *f.* 2, 3.

Family *Diplommatinidæ.*

Diplommatina, *Benson*—costata, *Hutton;* An. Mag. N. H. 1849, p. 194 : folliculus, *Pf.; Ibid,* p. 193 : Huttoni, *Pf.;* Progs. Z. S., 1852, p. 157.

CLASS PELECYPODA.

Order Veneracea.

Family *Cyrenidæ.*

Corbicula, *Megerle*—occidens, *Benson;* C. I. *t.* 138; *f.* 8, 9.

Pisidium, *Pfeiffer*—Nevellianum, *Theob.;* Progs. As. Soc. Ben., 1875.

Order Lucinacea.

Family *Unionidæ.*

Unio, *Philipsson*—marginalis, *Lam.* ; C. I. *t.* 43, *f.* 2 ; *t.* 44, *f.* 3 : corrugatus, *Müll.;* C. I. *t.* 45, *f.* 2-5 : cæruleus, *Lea;* C. I. *t.*, 12 ; *f.* 3.

References.

Hanley, S. and Theobald, W.—Conchologia Indica, Illustrations of the land and fresh-water shells of British India, London, 1876. Referred to as C. I. in the list above.

Theobald, W. Catalogue of the land and fresh-water shells of British India. Calcutta, 1876.

Nevill, G. Handlist of the shells in the Indian Museum, Calcutta.

There are also several very interesting papers in the Journal of the Asiatic Society, Calcutta, on Indian shells by Messrs. Theobald, W. Blanford and G. Nevill.

ARACHNIDA—Mites, Scorpions, Spiders.

Arachnida.

The Arachnida form a class of the great sub-kingdom Articulata, which also includes the Annelidæ, Crustacea, Myriapoda and Insecta. They have no proper metamorphosis, though during the several moultings that some pass through, structural changes take place, which approach in character the incomplete metamorphosis of certain orders of insects. In the Arachnida, the head and the thorax are soldered together in one piece known as the cephalo-thorax, and to the lower surface of this, as a rule, the legs are attached. The head is furnished with a pair of jaws called maxillæ and the mandibles of insects are represented by *fulces*, organs intended for seizing and compressing the insects or other substances on which the arachnids prey. There is also a part of variable form representing the *labium* in insects and in many a *ligula* or tongue. In some, these different portions are soldered together to form a sucking apparatus. Nearly every species possesses simple eyes varying in number from two to twelve and of first importance amongst the spiders in the most received system of classification. The abdomen is joined to the thorax by its entire breadth or by a pedicel and is either unsegmented or segmented. It is sometimes, as in the scorpions, prolonged into a segmented tail or in others into a button or a more or less hair-like appendage or is furnished with spinners and spinnerets. Arachnids are either

oviparous or ovo-viviparous. They are distributed into the following orders :—

I.—*Acaridea*, mites.

II.—*Pycnogonidea*, marine parasites.

III.—*Phalangidea*, Harvest-men : includes the family Phalangides.

IV.—*Solpugidea* : contains the family Galeodides.

V.—*Scorpionidea*, scorpions : contains the families Pseudoscorpiones, Androctonoides, Pandinoides.

VI.—*Thelyphonidea* : contains the families Thelyphonides and Phrynides.

VII.—*Araneidea*, spiders : contains some thirty-two families and some 260 genera.

The *Acaridea* comprise mites of all kinds and are common under the bark of trees, in the ground, in water and on decomposing animal and vegetable matter. They include the Indian itch insect (*Sarcoptes indica*) and the mites of cheese and sugar and are frequently found as parasites. The *Pycnogonidea* are marine parasites, of which an Indian species (*P. Kroyeri*) has lately been described[1] by Mr. Wood-Mason. The *Phalangidea* live on the young of other spiders, certain *Acaridea* and small insects. The *Solpugidea* comprise certain spider-like animals which differ from the true spiders in several structural details. To this order belongs the *Galeodes fatalis*, Herbst. (=*vorax*, Hutton), of which the late Captain Hutton has left us an interesting account. He tells us that it was his custom during the rainy season to spread a sheet on the ground any fine evening and placing a lamp near it, to collect the numerous insects that assembled. One evening two or three of these spiders made their appearance and no sooner did a moth or beetle alight than they snapped it up and devoured it. He secured one and placed it in a vessel, the bottom of which was well supplied with earth which had been hardened by pouring water on it and then allowing it to dry. The *Galeodes* soon began to dig a hole and in a very short time succeeded in making itself a subterranean retreat in which it usually resided, seldom coming out beyond the mouth of its den. It proceeded to dig out the earth at first with its strong jaws, cutting it away in a circle, and having thus loosened the soil,

[1] J. A. S. Ben., XLII., ii., 171.

it gathered it together into a heap with its anterior palpi and threw it out behind as a dog does in scratching a hole. When it had by this means succeeded in excavating a hole sufficiently large first to enter, instead of throwing out the loose earth as at first, it gathered a quantity together and surrounding or embracing it with the anterior palpi, shoved the load by main force before it up to the mouth of the cave and then returned for more. Having completed its task, it remained for a few days stationary and then refused to feed. It proved to be a female and deposited its ova, which appeared to be of about the size of a somewhat large mustard-seed and of a whitish hue. These hatched in about a fortnight and the young in about three weeks cast their first skin, when the jaws and palpi became a deep brown. They now commenced to move about, but at the first sight of danger invariably fled for refuge to their mother, who was able to distinguish between them and insects given to her as food. She was always ready for food, consuming at a single effort a lizard three inches long exclusive of the tail and being able to destroy a young bird and the young of a musk rat introduced to her den: but these she did not eat. One has been known to kill and eat a good sized scorpion. The usual size of an adult specimen is 2·5″—2·9″ long and the body or abdomen is about the size of a thrush's egg. When in motion the body is elevated from the ground and the two pairs of palpi or feelers are erected, ready for a seizure. The head is armed with two toothed *chelæ* or double jaws, somewhat like the fore-arms of a scorpion, one pair of which are advanced to hold the prey whilst the other cut it. The jaws thus alternately advance and cut until the victim is sawn in two.

The Scorpionidea or scorpions are too well known to require description. They vary in size from the little book scorpion (*Chelifer*) hardly quarter of an inch in length to the great black scorpion measuring six inches. In parts of the country there are persons who profess to be able to take any scorpion in their hands with impunity and at several Musalmán shrines in the North-Western Provinces scorpions are esteemed sacred. The family *Thelyphonides* of the order *Thelyphonidea* comprises a remarkable homogeneous group of which India possesses a fair number of examples. Last of all come the *Araneidea* or true spiders, varying in size from

[1] J. A. S. Ben., XI., 857: An. Mag. N. H., N. S., XII., 81.

almost microscopic animals to the great *Mygale* which is said to prey (?) upon birds. There is no doubt but that in the Arachnidæ we have a class of animals regarding which the Indian naturalist can afford considerable aid to science, for there is practically nothing known regarding its species in Upper India. The geographical range of some spiders is very great ; *Artema convexa* is found in Pernambuco in South America, in equatorial Africa and in Meerut, and *Gasteracantha frontata* is found in Africa and India. Hence, as observed by Stoliczka, we may reasonably expect to find in Western India a great number of species identical with those of Arabia and Egypt ; in southern India many referable to Ceylon species and nearly allied to those of the Mauritius and in the Burmese region others identical with or akin to the spiders of the Indian archipelago. To the west an admixture of African types and to the east a mingling of Malayan types will be found to prevail as in the *Vertebrata*. He adds :—" It is really remarkable that in examining a collection of spiders from our Eastern frontier, together with another made in Western India, often scarcely a single species will be found to be identical to both parts. Bengal has a strong admixture of Malayan types and several species are common to it, Burma and Asám. The Western Himálaya possess in the Arachnoid fauna a prominently European character, as their general climate would lead us to expect, and the Eastern Himálaya probably contains some Chinese or Malayan types. It is strange that not only dislike but a real enmity and ill-feeling against Arachnids appears to have taken hold of men's minds. No doubt the few species which secrete a poisonous fluid in special glands and through its use occasionally become dangerous are the source of much of this ill-feeling in India. They are, on the whole, certainly harmless and as regards usefulness are scarcely surpassed by any other class of animals. They live wholly on insects and destroy a very large number of those which often do much damage to both animal and vegetable life. Their instinct also is very highly developed and shows itself not only in the way in which they obtain their living but in their exposition of the art of weaving. Their whole life is passed in carrying out arrangements for their support that presuppose a considerable amount of thought and deliberation." Spiders should be preserved in spirits of wine. The colours are, however, so fleeting that the collector should at the

time of capture note the colour as well as the habits of the species, whether terrestrial or aquatic; whether it secures its prey by running after it, jumping on it or by lying in wait for it in natural or artificial cells; whether it has a fixed home, and if so, whether the reticulations of the web are close or in open geometrical order. All these matters are aids for the correct identification of species.

ARACHNIDA.

III.—PHALANGIDEA.

Family *Phalangides.*

Gagrella, *Stol.*—atrata (Cal.), signata (As.), *Stol.*: (Acanthonotus) niger *Koch*: (Phalangium) monocanthum, *Herbst.*

IV.—SOLPUGIDEA.

Family *Galeodides.*

Galeodes, Oliv.—fatalis (=vorax, *Hutton*) (N. I.) *Herbst*: brevipes (Mad.) *Gerv.*: orientalis (W. Ben.), *Stol.*

V.—SCORPIONIDEA.

Family *Pseudo-scorpiones.*

Chelifer, *Leach.*—cancroides (N. I.), *Linn.*

Family *Androctonoides.*

Buthus, *Leach.*—afer (N. I.), megacephalus, Cæsar, *Koch*: spinifer, *Ehr.*

Family *Pandinoides.*

Scorpiops, *Pet.*—Hardwickei (N. I.), *Gerv.*: slaber, *Hemp.*

VI.—THELYPHONIDEA.

Family *Thelyphonides.*

Thelyphonus, *Latr.*—angustus [=proscorpio, *Latr.*], (Ben.), *Lucas*: indicus, scabrinus, assamensis [=rufimanus, *Lucas ?*], Beddomei (W. Ben.), *Stol.*: caudatus (Ben. Mad.), *Linn.*

Family *Phrynides.*

Phrynus, *Oliv.*—Whitei (Ben.), *Gerv.*: marginemaculatus, nigrimanus, *Koch.*

VII.—Araneidea.

Family *Lycosides.*

Lycosa, *Latr.*—indagatrix (Mad.) *Walck.*: Greenalliæ (N. I.), *Black.*

Dolomedes, *Latr.*—longimanus (Cal.), *Stol.*

Family *Sphasides.*

Sphasus, *Walck.*—indicus, *Walck.*: lepidus, *Black.*: viridanus (Cal.), similaris (Cal.), *Stol.*

Hersilia, *Sav.*—calcuttensis, *Stol.*: indica, *Lucas.*

Family *Salticides.*

Salticus, *Latr.*—biguttatus (N. I.), candidus (N. I.), *Black.*

Family *Thomisiides.*

Thomisus, *Walck.*—tuberosus, *Black.*: pugilis (Cal.), elongatus (Cal.), Peelianus (As.), *Stol.*

Sparassus, *Walck.*—striatus (N.-W. P.) *Black.*

Family *Drassides.*

Gnaphosa, *Latr.*—Harpax (Bom.), *Camb.*

Drassus, *Walck.*—delicatus (N.-W. P.), *Black.*: macilentus, astrologus, luridus, ferrugineus (Bom.), *Camb.*

Cheiracanthium, *Koch.*—inornatum, insigne, vorax, indicum, (Bom.), *Cambridge.*

Clubiona, *Latr.*—filicata, drassodes (Bom.), *Camb.*

Family *Agelenides.*

Tegenaria, *Walck.*—civilis, *Walck.*

Family *Dictynides.*

Eresus, *Walck.*—tibialis (Mad.), *Camb.*

Family *Scytodides.*

Scytodes, *Latr.*—propinqua (Cal.), *Stol.*

Family *Pholcides.*

Pholcus, *Walck.*—Lyoni (N.-W. P.), *Black.*

Family *Theridides.*

Artema, *Walck.*—convexa (N.-W. P.), *Black.*

Argyrodes, *Sim.*—fassifrous, procrastinaus (Bom.), *Camb.*

Family *Epeïrides.*

Epeïra, *Walck.*—chrysogaster, malabariensis, *Walck.:* stellata, (Cal.), mammillaris (As.), braminica (Cal.), hirsutula (Cal.), *Stol.*

Tetragnatha, *Walck.*—bengalensis, *Walck.:* irridescens (Cal.), *Stol.:* decorata, *Black:* culta, argentata, *Camb.*

Nephila, *Leach.*—angustata (Cal. As.), cicatrosa (Cal.), *Stol.:* ornata, *Black.*

Meta, *Keyser.*—gracilis (Cal.), *Stol.*

Family *Gasteracanthides.*

Gasteracantha, *Latr.*—arcuata, *Walck.:* Helva, frontalis, *Black:* canningensis (Cal.), *Stol.*

References.

Walckenaar et Gervais.—Histoire Naturelle des Insectes Aptéres, Vols. I., II. (Walck); III., IV. (W. *et* G.). Paris, 1837-47.

Koch, C. J.—Uebersicht der Arachniden—systems. Nurnberg, 1837-47.

Hann and *Koch.*—Die Arachniden, Vols. I., II. (Hann), III.-XII. (Koch). Nurnberg, 1831-46.

Thorell.—On the classification of Scorpions. An. Mag., N. H., 4th Ser., XVII, I.

Peters.—Monograph of the Scorpions. Monats. Berl. Akad, 1861, 507.

Blackwall.—Spiders of Great Britain. Ray Society, 1861-64. An. Mag. N. H., 3rd Ser, II., 332: VIII., 443: XIV., 36: XVIII., 459: XIX., 384.

Butler.—List of the species of Galeodides. On Thelyphonus, An. Mag., N. H., 4th Ser. X., 201: XII., 114. J. Linn. Soc., XII., 151.

Stoliczka.—Indian Arachnoidea, J. A. S. Ben., XXXVIII., ii., 201: XLII., ii., 126.

Cambridge.—Article 'Arachnida' in Encyclopædia Brittanica, 1875: the best summary that we possess: see also Linn. Trans., 1874. P. Z. S., 1874, p. 370; 1880, p. 320.

Murray.—Economic Entomology (Aptera). South Kensington Hand-book.

INSECTA—Insects.

Insects.

There is no class of animals on which more has been written than insects and none of which the Indian species are so little known to the general public. Whether we regard the position of insects in nature from a purely scientific point of view or their uses in the arts and the influence exercised by them over the products of nature most valuable to man from an economic stand-point, the importance of a correct knowledge of their life-history and habits is equally established.

The study of the local insect fauna of the Himálayan districts of the North-Western Provinces is in itself especially to be desired; for the Káli river is not only a political barrier, but also a great natural boundary separating the species proper to the eastern Himálaya and related to the great Malayan fauna from those that belong to the western range with their Palæarctic and African affinities. Moreover, between the swamps of the Tarái on the south and the snowy range there are examples of diverse forms of climate, each with its corresponding flora and fauna. In places, the naturalist may ascend direct from a river bed bearing vegetation common to it and the tropics to the region of perpetual snow with its northern flora. Hence we find along the foot of the hills and far up the deeper valleys an abundance of forms of insect life typical of more tropical climes and well beyond their natural limits. They betray their southern origin in their dwarfed size and soon give place to other types fulfilling the same functions under a different and more suitable form. In addition to this mingling of northern and southern forms there is also an affinity in many genera with the corresponding genera found in Europe and northern Asia and there are several species even identical with those found in Europe, so that we have within a comparatively small field, examples of the fauna of the principal nature-divisions of the old world and a rare opportunity for contributing to the knowledge of the geographical distribution of animals.

Value of the study.

It is not, however, to the purely scientific value of a study of the insect fauna of the Kumaon hills that I would call attention, but to the practical uses to which knowledge thus gained may be applied in the every day affairs of life. Apart from the pleasure and profit derived from a properly directed examination of insect phenomena, all really useful work in the same field must possess a systematic basis if for no other reason than that thus alone the observer can communicate the results of his labour to others. The apparently hard names used by entomologists to distinguish species are merely so many tickets to show the place of the insect named in the general scheme of creation and with the place, its affinities and often its habits. It would be impossible to give here a description of every insect, but I have, in the following pages, briefly described the several orders and recorded the principal families and genera belonging to them found

in India. The materials at my disposal have not allowed me, except in the case of the diurnal Lepidoptera, to separate those found in Kumaon from those only found in other parts of India; but the lists, which are practically the first of their kind for most orders, will aid the student materially by showing what may be looked for. To the forester especially the study of entomology is a necessity, to enable him to prevent the destruction not only of the living trees and young plants in his nurseries but of the timber stored in his depôts. The tea-planter will successfully combat the attacks of the beetle larva that eats the roots of his plants and the 'red spider' that lives on its leaves if he studies their habits. The weevils of wheat, grain, peas, rice, maize and the blight insects that attack the same crops have hitherto had no attention bestowed on them, nor have the insects injurious to domestic animals and human beings been studied with the care to which they are entitled. The economy of the lac insect is not generally known and the life-history of the various species of honey-bee has been but imperfectly investigated. He who shall discover means whereby the injuries caused by white-ants can be prevented and the discomforts due to the attacks of mosquitos and cattle-flies can be mitigated will have deserved well of his country and indeed of the whole human race.

Anatomy.

Both the Greek (*entoma*) and Latin (*insecta*) name for the class denote notched animals. Insects have, as a rule, wings and breathe by means of air-tubes which ramify throughout the internal organs. The body is made up of three parts, the head, thorax and abdomen. On the head the oral or buccal apparatus, eyes and antennæ may be distinguished. The oral apparatus consists of six parts, of which four are in pairs and move transversely, whilst two, the upper lip (*labrum*) and the under lip (*labium*), move up and down. Of those which move transversely one pair forms the upper jaws or mandibles and the other lower jaws or maxillæ, to the latter of which as well as to the under lip, palpi or feelers are attached. The eyes are either simple or compound. The simple eyes are called ocelli and may be seen behind the larger eyes in bees and wasps, and the compound eyes are large enough, as in the case of dragon-flies, to appear to meet and are composed of six-sided facets often numbering many thousands in a single insect. The antennæ are moveable, jointed

threads attached to the head usually close to the eyes. In masticating insects, like beetles and locusts, the organs of the head are as described, but in sucking insects like butterflies and bugs there are several modifications. The lower jaws in butterflies are converted into a trunk or tongue and the jaws in bugs appear in the form of a rostrum or beak. The thorax in all insects consists of three pieces, the prothorax, mesothorax and metathorax. In four-winged insects one pair of wings are attached to the middle segment and one to the posterior segment, and in two-winged insects the wings are attached to the mesothorax. The majority of insects have six legs, one pair being attached to the lower surface of each segment of the thorax. The legs are divided into the haunch (*coxa*), trochanter, thigh (*femur*), shank (*tibia*) and tarsi or feet, which last consists of several joints varying in different families. As a rule, insects possess wings in the perfect state, but each of the orders contain some apterous forms like the female glowworm and the worker ants and all undergo a metamorphosis more or less complete. From the egg, the larva state is reached, from that the pupa state and then the imago or perfect insect appears. In the beetles, butterflies and flies, the larva differs more from the perfect insect than in the grasshoppers and bugs, but in all, the larva stage is marked by the entire absence of wings, the pupa stage by the possession of rudimentary wings and the imago stage by perfect wings. There is a marvellous adaptation of the larva to its surroundings, so that many are alike in form of which the perfect insects may belong not only to different families of the same order, but to different orders. The grubs of the flesh-eating Diptera, of the gall-insects belonging to the order Hymenoptera and of the weevils of the order Coleoptera are all of the same description, fat, fleshy, legless, accustomed to live amid their food. Similarly those larvæ which live on fresh vegetable juices and those which live on the inner sap of trees closely resemble other larvæ of similar habits whose ultimate form places them in different orders. The changes too from the larva to the pupa stage are not always abrupt and well-marked. In many cases they are numerous, each adapted to some change in the life-history of the insect and its surroundings and are so far apparently independent of the ultimate change to the imago state. These may be called adaptational changes and are accompanied by slight developmental

modifications which gradually bring the pupa state to that of the imago without such sudden alterations in form as are seen in some orders and without any marked cessation of activity. The life-history of any of the grasshoppers compared with that of a butterfly will illustrate this fact. Where great developmental changes take place in the pupa state there is a period of quiescence and a considerable shortening of the time within which the change is effected. The duration of life in one stage has much apparent connection with the length of time passed in others. Where the larva state continues for some years as in the case of many beetles, the perfect insect lives but a short time in comparison with others where the change occurs sooner. Some moths and flies live but a few hours, others many months and some species of ants for several years.

Enough has been said in the way of introduction, and I shall now proceed to give a list of the Indian species of each order. The names are taken from all the recognised authorities that I have been able to consult, but it is to be clearly understood that these lists are not to be considered exhaustive or to contain the latest arrangements and terminology of each order. They are the essence of notes made from time to time and are intended to serve as an indication of the families, genera and species that they may be looked for.[1] It is not yet time for any one to undertake a systematic survey of the hitherto known Indian insects, except perhaps the diurnal Lepidoptera, since they comprise a number of species which have been described by writers who have held very different systematic views and who have in many instances given very misleading or imperfect descriptions. The only course left open to those who desire to place the study of our magnificent insect fauna on a better footing is to endeavour to complete the lists of described species and elucidate their synonymy and then survey each order, family and genus in detail, and correct the errors that have been made. I need not say that this is a work which can only be done by many competent labourers working together and taking up section by section and is utterly beyond the power of one.

Insects are distributed amongst the following orders :—

Coleoptera—beetles. *Neuroptera*, dragon-flies, &c. *Diptera*, flies.

[1] The plan adopted for recording 'locality' will be found at page 3.

Orthoptera—locusts, &c. *Lepidoptera*, butterflies, moths. *Strepsiptera*, certain parasites.

Hemiptera—bugs, cicadas, &c. *Hymenoptera*, ants, bees. *Thysanura*, spring-tails.

References.

Westwood.—Introduction to the modern classification of Insects. London, 1839-40.

Wilson, J.—Article 'Entomology' in Enc. Brit., 8th edition.

Kirby and Spence.—Introduction to Entomology. London, 1822.

Burmeister.—Handbuch der Entomologie. Berlin, 1832.

Duncan.—Transformations of Insects. London (no date).

Percheron.—Bibliographic Entomologique. Paris, 1837.

Van der Hoëven.—Handbook of Zoology, edition Clark. London, 1856.

All the above are practical works, sadly out of date, but containing much that is invaluable. The following are picture books comprising notices of many Indian insects:—

Drury.—Illustrations of exotic Entomology, ed. Westwood. London, 1837.

Donovan.—Natural History of the Insects of India and China, ed. Westwood. London, 1842.

Westwood.—Cabinet of Oriental Entomology, London, 1848: Arcana Entomologica. London, 1845.

COLEOPTERA—Beetles.

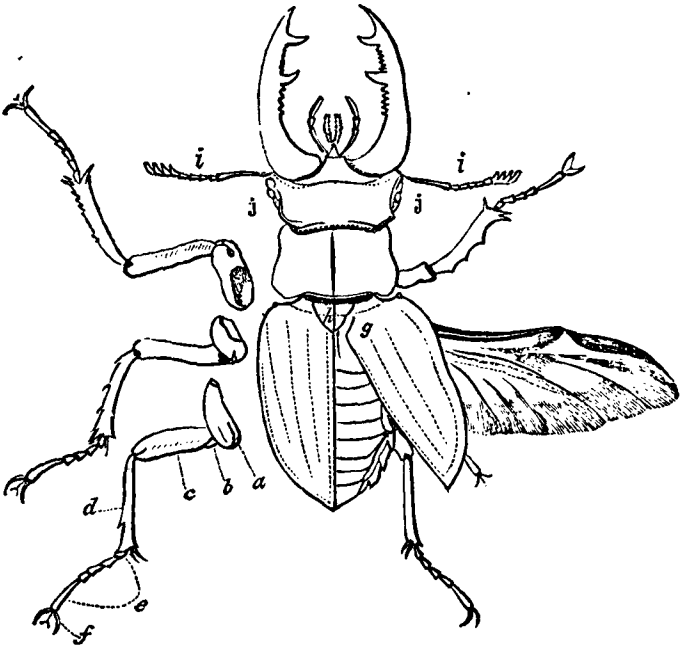
Beetles.

The order Coleoptera (sheath-winged) comprises those insects commonly known as beetles. They vary much in form, but all pass through a complete metamorphosis, the larva, pupa and imago stages. The perfect insect is composed of three parts, the head, trunk and abdomen. The head possesses a mouth formed for mastication and furnished with an upper lip (*labrum*), a lower lip (*labium*), a pair of mandibles and a pair of maxillæ. The labium is composed of two parts, the *mentum* or chin and the *ligula* or tongue, and is also furnished with a pair of *palpi* or feelers, appendages which are also attached to the maxillæ (*i* in figure). Where there are a pair of palpi on each maxilla, the exterior pair never consist of more than four joints, whilst those of the under lip have seldom more than three joints. The head is further furnished with antennæ and eyes (*j* in figure). The antennæ though varying in form and structure not only in different genera but often in the sexes of the same genus usually have ten or eleven articulations. They are inserted in the anterior portion of the head, a little in front of or below the eyes. The eyes are two in

58976

number and compound and are either entire or divided into two by a horny septum. The thorax is divided into three parts, the prothorax, mesothorax and metathorax. The wings are four in number, of which the anterior pair (*elytra : g* in figure) are hard and leathery and not used for flight. The posterior pair of wings are membranous and when at rest lie folded closely together beneath the anterior pair. In some species the membranous wings are apparently wanting and, in such cases, the coriaceous pair are soldered together along their inner edge and are immovable. The legs are attached to the lower surface of the thorax, one pair to each division. The elytra are attached to the upper surface of the mesothorax and the membranous wings to the upper surface of the metathorax, a small triangular piece at the base of the elytra is known as the *scutellum* (*h* in figure) and is made up of several parts mostly soldered together. The legs are composed of five pieces, *a*, the haunch or *coxa : b*, the trochanter ; *c*, the *femur* or thigh ; *d*, the *tibia* or shank ; *e*, the *tarsus* or foot, and *f* the claw, as shown in the following illustration ;—

FIG. 1.



The parts of the mouth are the *maxillæ* (Fig. 2 *a*), *labium* (Fig. 2 *b*), mandibles (Fig. 3 *b*) and *labrum* (Fig. 3 *a*) shown below :—

Fig. 2.

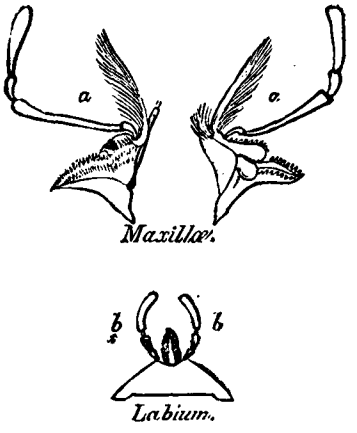
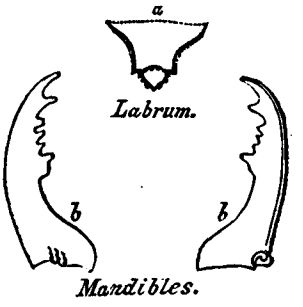


Fig. 3.



Classification.

There are several systems of classification, but the one most commonly received bases the broad divisions primarily on the number of joints in the tarsi or feet, and secondly on the habits of the insect or the structure of the antennæ. This system has the disadvantage of bringing together families naturally widely separate and of removing from their natural groups, families closely affined, but on the whole it is the most convenient of all that have been proposed. In the following list, Lacordaire's terminology and arrangements have been followed and his corrections have been observed. The following conspectus of the greater divisions may be accepted :—

I. Pentamera—five joints in each tarsus.

1. *Geodephaga*- predacious land beetles : includes the Cicindelidæ and Carabinæ.
2. *Hydrodephaga*—carnivorous water-beetles : includes the Dytiscidæ and Gyrinidæ.
3. *Philhydrida* (Palpicornes)—water loving beetles : includes the Hydrophilidæ, Hydrobiidæ and Sphæridiidæ.
4. *Necrophaga*—scavengers : includes the Paussidæ, Silphidæ, Nitidulidæ, Trogositidæ, Colydiadæ, Cucujidæ and Dermestidæ.

5. *Brachelytra*—short elytra : includes the Staphylinidæ.
6. *Clavicornes*—clubbed antennæ : includes the Histeridæ.
7. *Lamellicornes*—leaved antennæ : includes the Lucanidæ, Copridæ, Aphodiidæ, Orphnidæ, Hybosoridæ, Geotrupidæ, Passalidæ, Melolonthidæ, Rutelidæ, Dynastidæ, Cetoniidæ.
8. *Serricornes*—elongate filiform antennæ : includes the Buprestidæ, Eucnemidæ, Elateridæ, Malacodermidæ, Ptinidæ and Cleridæ.

II. **Heteromera**—posterior pair of tarsi, 4-jointed, rest 5-jointed.

1. *Trachelia*—head triangular and connected with the thorax by a neck : includes the Lagridæ, Pedilidæ, Anthicidæ, Pyrochroidæ, Mordellidæ, Rhipiphoridæ, Meloidæ.
2. *Atrachelia*—having no distinct neck ; incudes the Tenebrionidæ, Cistelidæ.

III. **Pseudo-tetramera**—apparently 4-jointed throughout.

1. *Rhynchophora*—having a beak or rostrum like the weevils : includes the Bruchidæ, Curculionidæ.
2. *Longicornes*—having long horns or antennæ : includes the Prionidæ, Cerambycidæ, Lamiadæ.
3. *Phytophaga*—having neither the beak of the first or the long antennæ of the second group : includes the Crioceridæ, Galerucidæ, Cassididæ, Chrysomelidæ.

IV. **Pseudo-trimera**—apparently 3-jointed.

This section includes a single group comprising the Coccinelidæ, Erotylidæ, &c.

A good authority estimates the number of known species of beetles at 70,000, and these are probably not more than half the total number in existence.

Before proceeding with the list we shall briefly note the principal families that have been recorded from India in the same order as that given above. The first of the Pentamerous group is the family *Cicindelidæ* or tiger-beetles, which are well represented in India by the species of the genus *Cicindela*. They are remarkable

Pentamera.

for their bright metallic colours and active habits and frequent dry sandy soils. Their larvæ inhabit holes in the earth, the entrance to which is closed by the insect's head as it lies in wait for its prey. They are very voracious and quarrelsome and undergo the change to the pupa state in their cells. A species of *Collyris* is common in the highlands near Mhow. The next family comprises the *Carabidæ* which are especially numerous in species and individuals in India. The species of the genus *Brachinus* belonging to this family are remarkable for secreting in the abdomen a caustic liquor of an exceedingly penetrating odour which they discharge when alarmed and which produces a detonating sound whence their vulgar name 'Bombardier-beetles' is derived. A similar phenomenon has been observed amongst the Indian *Paussidæ*. The beetles of the genus *Calosoma* are of a bright rich colour, but most of the family are clad in black or sober brown. *Siagona* and other genera are found in the nests of white-ants and *Casnonia* is very common in Central India. The entire family conceal themselves in the earth under stones or the bark of trees and are known as ground-beetles. The section *Hydrodephaga* includes the predacious water-beetles which have the body oval and somewhat depressed in form and the posterior four legs adapted for swimming. They pass the first and the last stage of their existence in placid water and are very voracious in their habits, attacking even the small fry of fish. They breathe by means of *tracheæ*, and for this purpose they rise to the surface of the water and admit the air beneath their wing-cases. In the dusk of the evening they change their quarters from one *jhíl* or marsh to another. The *Gyrinidæ* or whirligigs differ from the *Dytiscidæ* or diving-beetles in having the antennæ short or stout and so attached to the head as to resemble ears. The *Philhydrida* have not been closely examined in India. They are amphibious in their habits and are found on the banks of stagnant pools where they live on decaying animal and vegetable matter.

Rentamera.

The *Necrophaga* or scavengers include the *Paussidæ*, which are well represented in upper India. Like the beetles of the genus *Brachinus* they have the power, on being alarmed, to emit from the last section of the abdomen a very acrid liquid having an acid reaction which when it

Necrophaga.

comes in contact with the air turns into smoke with a considerable explosion. Captain Boyes has given an account[1] of this phenomenon in some species (*P. Fichtelii* and others) captured by him near Benares and Almora. The *Silphidæ* or shield-beetles are the sexton-beetles of India and are well known from their habits of excavating the earth below the dead body of a bird, rat or other small animal which they afterwards cover with loose soil and so secure it to provide food for their larvæ. They have been seen to completely bury the body of a crow in a few hours and are found all over the plains. The females lay their eggs in the dead body and when the larvæ appear, their food is around them. The perfect insects frequently emit a fetid odour and when alarmed discharge a thick and dark-coloured liquid from their bodies. The *Nitidulidæ* are also found in carrion, but many species occur on flowers, in fungi and beneath the bark of trees. The *Trogositidæ* are found in the larva state in grain and the *Cucujidæ* live beneath the bark of trees. The *Dermestes lardarius* or bacon-beetle of Europe has been found in Nepál and derives its English name from its fondness for lard, but it does not disdain to feed on skins. It is a minute insect with a long body and 10-jointed antennæ and with the bases of the elytra fawn-coloured and marked with three dark spots.

Brachelytra.

The great family *Staphylinidæ* belongs to the section *Brachelytra* so called because the wing-cases do not cover the whole of the upper surface of the abdomen, and in consequence the skin of the upper surface where exposed is firm and coriaceous contrary to the general rule. The terminal segment of the abdomen is furnished with two vesicles which are protruded at will and emit an acrid and sometimes fetid vapour. They feed principally on decaying vegetable matter, fungi and rotten timber and do no injury to living trees. Many of them are of minute size and difficult to collect and identify. The *Histeridæ* form a section of the *Clavicornes* or beetles possessing clubbed antennæ and with the *Byrrhidæ* or pill-beetles are distinguished by their habit of rolling themselves into the form of a pill and feigning death when alarmed. They feed on decaying vegetable matter, the dung of herbivorous animals and rotten wood. The larvæ have the same habits and are distinguished by a scaly head

[1] J. A. S. Ben., XII., 421.

of a reddish brown colour and a yellowish white, smooth, soft, thin body.

Lamellicornes.

The *Lamellicornes* comprise a vast assemblage of beetles which prey chiefly on living vegetable tissues. The antennæ usually end in a club or mass consisting of three joints expanded in the form of thinnish plates or leaves disposed in various ways. Some have the appearance of the spokes of a fan, others the leaves of a book or the teeth of a comb or a series of funnels placed above and within each other. The larvæ are furnished with six feet, strong mandibles and are divided into twelve segments. They often remain in the larval stage for several years and protect themselves by a cocoon before entering on the pupa state. They comprise amongst them some of the most common and determined enemies of the forester. The great stag-beetle (*Lucanus*) must be familiar to all visitors to our hill-stations where they are found dead in all the forest-walks about the middle of the rains, having survived only to fulfil their duty in propagating their species. There is hardly one in ten of the oak trees around the settlement at Naini Tál that is not infested by their larvæ who remain in that state for at least two or three years. The males are distinguished from the females by the abnormally developed mandibles, somewhat resembling the antlers of a stag and hence their name. The larvæ, as already described, are furnished with powerful jaws with which they gnaw the wood into a kind of dust. From this they form cells in the wood in which they undergo the change into the pupa state. Each bores deeply into the tree; cutting channels for itself parallel to the length of the stem up and down. These channels are connected by cross chambers one with another and a portion of the refuse is ejected from the orifice forming the entrance and always shows the presence of the insect within. The *Lamellicornes* are at the same time the most brilliantly coloured of all the Indian insects. *L. multidentatus* is of a most beautiful metallic chestnut colour all over its body, and *L. Gazella* is the type of a section in which the thorax is black and the prominent colour of the elytra is a deep nutty brown. The *Lucanidæ* are common throughout the hills, but do not appear to be found in the plains.

The *Ateuchus sacer*, or sacred scarabæus of Egypt, belongs to the family *Copridæ*, of which there are numerous representatives in India.

A. sanctus of India is in form and colour much the same as the Egyptian sacred beetle. The members of this family are called dung-beetles from the female laying her eggs in a small pellet of dung which she then with the assistance of the male rolls about and pats until it assumes a spherical form. She next excavates a hole in the ground and having rolled the dung-pellet containing her egg into it, carefully covers up the orifice and there the young undergo their metamorphosis. The genus *Onthophagus* contains some beautiful species of a small size and brilliant colour, and Boyes has noted that he has taken one species (*O. igneus*) only in the bodies of dead snakes. The females of the family *Aphodiidæ* are not so careful about the future of their young, but simply lay their eggs in the dung that is to form the food of their larvæ. The *Orphnidæ* affect sandy places and the *Geotrupidæ* are always found near dung. The females of the latter group burrow through the droppings into the ground and there deposit some of the dung and on it an egg, then another layer of dung and an egg until the chamber is filled. The larvæ are oval, fleshy, legless maggots and feed on the dung provided for them. Stoliczka notes that no species of the Passalidæ is as yet known from the Himálaya west of Nepál or from any part of Central India or the Panjáb.

The *Melolonthidæ* comprise many beetles for the most part of a brown or sober colour that live on vegetable substances through the whole of their existence. In many species the larvæ remain in that state for three or four years and the perfect insects exist only for a week or two and perish so soon as the female has placed her eggs in a place of safety. The female selects for this purpose a spot near the foot of a tree and there digs a hole and lays her eggs. The larvæ are soft, elongated, of a dirty white or yellowish colour, provided with six short scaly feet, five-jointed antennæ and a scaly head. During the hot weather they devour greedily all vegetable substances near them, and so soon as the winter commences they descend into the earth again and hybernate. In Dehra Dún their ravages were successfully combated by digging up the soil around each plant and collecting the beetles in baskets destroy them by boiling water. This plan soon cleared the plantation of the pest. The magnificent *Euchirus* belongs to this family and has been taken in the Káli valley. The upper side of the body is of a

brilliant metallic green, tinged with copper and strongly punctured: the elytra are nearly black, with a brassy tinge and with numerous bright fulvous spots of irregular form which are so disposed as to form four or five longitudinal lines on each wing-cover. The rhinoceros beetle (*E. Hardwickei*) found near Almora belongs to the *Dynastidæ* as well as the genus *Oryctes* which affects the decaying trunks of the date-palm. To the Rose-beetles belongs the beautiful *Jumnos Roylei* of Royle's 'Himálaya' found near Mussooree. It feeds on the flowers and tender tissues of plants and is amongst the most remarkable of the forms found in the local fauna.

Serricornes.

To the *Serricornes* belong the magnificent metallic beetles known as *Buprestidæ*. Nothing can exceed the beauty of their appearance, green and gold adorned with rubies, emeralds and diamonds as they flash about in the sun. Their elytra are used for ornamenting dresses and sell for about two rupees per mille. The *Buprestidæ* pass their larval state in the heart of timber trees and must be reckoned amongst the enemies of the forester. The larva of one species after maturity bores into felled logs of *sál* to the depth of from two to three inches, forming a diamond-shaped orifice and in such numbers as to make the timber useless afterwards. It undergoes its change to the pupa state in the timber and there remains until the metamorphosis is complete. Mr. Thompson has found a *khair* tree (*A. Catechu*) killed by this insect which also attacks the *sál* (*S. robusta*) and mango. A small *Buprestis* of a shining olive colour with yellowish-white spots is frequently found in the timber of the *Pinus longifolia* and when numerous, its larvæ render a log quite unfit for beams as their borings are frequently to a great depth. The mode usually adopted to protect felled timber from the attacks of these insects is to remove the bark as soon after the log is felled as possible and if already infested to immerse the log in water for a few days. The perfect insect deposits her eggs in the bark and when they have hatched, the larvæ make their way into the timber. The removal of the bark renders the log unfit for the purpose of hatching eggs and if the larvæ have already settled in the heartwood, they perish by immersion in water from want of air. Westwood has figured the beautiful specimen of the *Eucnemidæ* recorded

in the list under that family. It is of a violet-blue colour and typically represents the sub-division of the *Serricornes* known as *Sternoxi* which are characterised by the solid form of the body and by the middle portion of the thorax being elongated and advanced so far as below the mouth. The mesothorax is further usually marked by a groove on each side in which the short antennæ are lodged. The *Elateridæ* or springers are well represented in the hills where the brilliant metallic green elytra of *Campsosternus Stephensii* are collected for embroidery. The family *Malacodermidæ* includes the genus *Lampyris*, in which the species called *jaganu* in the vernacular emits a phosphorescent light from the lower segments of the abdomen.

The brilliant blue *Necrobia violacea* belonging to the family *Cleridæ* is found in Europe as well as in India and is a carrion feeder. The beetles of the family *Ptinidæ* are remarkable for their persistence in feigning death when alarmed, so that even when maimed and roasted at a fire they do not stir a limb. The genus *Anobium* which furnishes the death-tick belongs to this family and gives us several representatives amongst the wood-borers in India. In Europe we have also *Scolytus destructor* which makes its burrows in the bark of the elm and *Tomicus typographus* which marks the fir and pine.

Tomicus typographus after Duncan.

In India the representatives of all three genera are known commonly under the name *gún*, of which species attack and bore into all felled timber and bambus and even into the hard heartwood of the hill oak and filled oaken casks of beer and water. The white wood of the *sál* (*Shorea robusta*) suffers much from the same insects and frequently rafters made of immature *sál* saplings fall to pieces from their attacks and pine beams are so completely hollowed out that nothing but the shell remains. Another species allied

to *Anobium* bores pine logs to the depth of a foot, but only when the bark is left on them after being felled. Another attacks the bambu, and there are few bambus of any age without the fine holes made by these small insects for entrance to their feeding ground. Cheroots, books and furniture are equally liable to their attacks, and even the painted Bareilly-made and Dehli-made furniture fall to pieces, pierced and eaten by numerous minute beetles of this family.

The larvæ of *Anobium* are short and soft and are provided with six feet and a hard scaly head and the mouth is furnished with two very strong jaws by which it pierces the hardest wood. The larvæ of *Bostrichus* (*Apate*), another lignivorous genus, are usually curved into an arch composed of twelve distinct rings and provided with scaly feet. They also possess a scaly head and are furnished with strong, gnawing jaws. They undergo the transition to the pupa and perfect state in the wood and only leave it to perpetuate their race. The dust seen at the mouth of and around the holes that mark the presence of these insects is simply the substance of the wood passed out by them in the form of excrement. As they all breathe by *tracheæ*, the simple and only plan for getting rid of them is to immerse the wood infected in water for a sufficient time to drown them.

Heteromera.

The section Trachelia of Heteromerous beetles includes many vegetable feeders most of which are minute insects very difficult to identify. Amongst the *Meloidæ* or oil-beetles, which are so named from their possessing the power of discharging an oily fluid from their legs, we have the several genera to which belong beetles with vesicating properties known generically as Spanish flies. *Mylabris cichorii*, Fabr. is common in the south of Europe and India and is officinal in the Indian Pharmacopœia. In upper India we have *Meloë trianthema*, *Cantharis* (Lytta) *gigas* and *violacea*, and in Madras, *Mylabris pustulata* and *puncta*, besides other species in other Provinces. Larvæ of the genus *Cantharis* are said to be parasitical on the bodies of the Hymenoptera and Diptera. The beetles of the section *Atrachelia* are distinguished by the absence of a neck and include the large number arranged under the family *Tenebrionidæ*. Nearly all are terrestrial in their habits and dwell

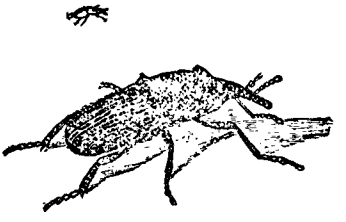
on the ground under stones, in sandy places or in dark parts of buildings and in old walls. They are usually of a black or ashen colour and from this derive their name. *Blaps* distinguished by its square and slightly convex thorax frequents the store-room and the genus *Tenebrio* furnishes the meal-worm of the flour bin.

The beetles comprising the section Pseudo-tetramera possess apparently only four joints in each tarsus, but in most cases there are in reality five joints. They include the great tribes of weevils (*Rhyncophora*) and long-horns (*Longicornes*), both of which are so destructive to all forms of vegetation living and dead. The *Rhyncophora* have the front of the head elongated into a rostrum or snout and attack living trees and plants, grain and timber. To this tribe belongs the *Bruchus pisi* or pea-grub, which deposits its eggs in the tender germ where they are hatched and eventually the pupa stage is reached and the perfect insect departs through a minute hole in the mature pea. The Indian representative, if not identical, has similar habits and attacks peas, beans and gram and the seeds of the timber trees of the same family. A species of this family, very

Rhynchites Bacchus.

common in our forests, has exactly the same habit. This insect lays its eggs in the flower of the *sál* and there they hatch and the larva grows with the flower and feeds on the fruit until it is time for it to undergo the change into the pupa state. It then gnaws off the fruit from the stalk and falls with the fruit to the ground, where it eats its way out and buries itself a few inches in the earth to become a pupa and then a perfect insect. Each seed-pod of the *sál* often contains two or four larvæ of this species. Amongst the

Longicornes we have the *Calandra granaria* which feeds upon wheat, barley (maize), and the like and *Calandra oryzæ*, the weevil of rice.



Calandra oryzæ.

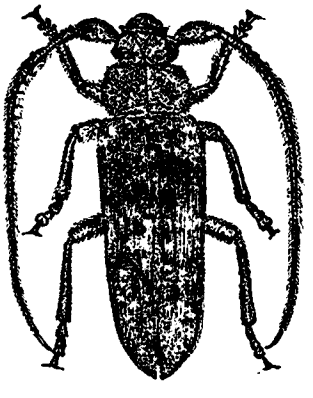
Both are the makers of the fine holes found in the grains that they attack. The corn-beetle is about an eighth of an inch in length and of a reddish brown colour. The female deposits her eggs on the corn after it has been stored and the larvæ bore into the grain and feed on the flour. They undergo their change into the pupa state within the grain and emerge a perfect insect ready to commence the cycle of change afresh. Kiln-drying the grain appears to be the only effective method for getting rid of it.

Longicornes.

The long-horns are also known as Capricornes or goat-horned from the length and form of their antennæ. Their larvæ look like stout, elongated white worms and the segments of their bodies are much alike in all.[1] All the segments are a little swollen ; the first, however, is the largest and is covered above and below with a leathery plate. They have rudimentary antennæ. These larvæ live in the trunks and branches of trees and in the cellular structure of some herbaceous plants. Since they never come to the light, they are colourless and have soft integuments, but as they feed upon the wood out of which they form galleries they have very strong jaws and a very stout head. As they do not want to walk much in their galleries they have no legs except in a very rudimentary form ; their swollen segments enabling them to climb. This history of the peculiar structure of these larvæ presents striking analogies with that of the wood-eating larvæ of the Lepidoptera and Hymenoptera and the existence of similar adaptations in very different insects in order to enable them to live under the same conditions of existence is

[1] Duncan, Transf. Ins., 325.

very remarkable. The strength of the jaws, too, differs according to the density of the tissues of the plant on which the insects live. The abdomen of the female in certain genera is provided with an ovipositor by which she can place her eggs through the crevices of the bark of trees in the interior where they hatch and the larvæ find their proper food. The larvæ make a cocoon by joining together fragments of wood and bits of vegetable matter with their saliva and within it undergo their transformation into nymphs. A species of *Lamia* attacks the *Acacia*, and it is believed[1] that one of the *Prionidæ* furnishes the white-grub of the tea-shrub. The perfect insect makes an incision at the root of a tea bush and there deposits her eggs and the larva as soon as it is hatched bores into the heart of the stem. It then either hollows out the stem upwards or descends to the tap root first and then moves upwards. In either case the bush dies whilst the larva turns into a pupa in the ground below. As a rule these insects attack plants in which the healthy flow of sap has been interrupted by injury either from the hoe or fire. Similarly the species of *Cerambyx* that attacks the *sál* in log only does so when the bark is allowed to remain on it and the living tree only in parts where it has been injured and partial decay has set in. The grubs of this family are known under the vernacular name *makora* in the sub-montane tract and Rohilkhand and are found in the catechu, *tún*, *sisu*, *riúni*, mango, pine and even other trees of which the sap possesses a penetrating odour. *Sál* saplings suffer



Oplatocera callidioides.

[1] Thompson.

from another species of *Longicornes* of which the larva cuts a way for itself in the young soft stem from the root to the highest point it can reach and destroys the young tree. Young trees affected by this grub can be recognized by the heaps of excrementitious matter looking like saw-dust that are expelled by the insect from the aperture forming the opening to its burrow. A minute species does considerable damage to the outer tissues of the wood beneath the bark in the *khair*. The *semal* (*Bombax malabaricum*), *súngna* (*Moringa pterygosperma*) and *rúngra* (*Erythrina suberosa*) are subject to the ravages of another species of the *Lamiidæ* of which *Monochamus Roylii* is a good example. The larva of this insect is very large and Mr. Thompson collected from one log of *súngna*, forty-three perfect beetles, about a dozen larvæ and five or six pupæ though the log was not above six feet in length and thirty inches in girth. The *bhainsh* (*Salix tetrasperma*), *dhák* (*Butea frondosa*), *jhingan* (*Odina Wodier*) and the cotton-tree are infested by another species of the same family which forms a solid cocoon of a substance resembling lime some sixteenth of an inch in thickness. Enough has been written to show the economical importance of a study of these insects.

Phytophaga.

The sub-division *Phytophaga* comprises those pseudo-tetramerous beetles that have neither a rostrum nor long antennæ. They are further distributed into the *Eupoda* including the *Sagridæ* and *Criocerida* and the *Cyclica* containing the *Hispidæ*, *Cassididæ*, *Galerucidæ*, *Eumolpidæ*, *Chrysomelidæ* and *Erotylidæ*. The *Sagridæ* are distinguished by the development of the thighs and some of them are most conspicuous for the brilliant colour of their elytra. The *Criocerida* are small insects remarkable for their handsome form and in some species for their bright colours. Their larvæ have soft bodies and protect themselves by covering two-thirds of the upper portions of their bodies with excrementitious matter which in colour and appearance closely resemble the vegetable tissues on which they feed. This they are enabled to do by the position of the anal vent which is placed on the side of the back a little removed from the extremity of the abdomen, so that the excrements are expelled in a line with the body. The larvæ of the *Hispidæ* have a similar habit, and allied to them are the

Cassididæ or tortoise beetles, so called from the thorax being more or less semi-circular and covering the head. The last segment of the abdomen of the larvæ is furnished with a fork which receives the excrementitious matter designed to cover and protect the soft upper portion of the body. The *Chrysomelidæ* or golden beetles are also leaf-eating insects, many of which are adorned with the most brilliant metallic colours. Their larvæ are provided with the two-pronged fork for the fixation of the covering of stercoraceous matter as in the preceding family. To this family belongs the notorious potato-beetle of Colorado (*Doryphora decemlineata*) and to the *Galerucidæ*, the *Haltica nemorum* or turnip fly.

Trimera.

To the last great group having three joints in each tarsus belong the *Coccinelidæ* or lady-birds which are the same in form in India as in Europe. They are amongst the most useful scavengers of the flower garden, their larvæ living for the most part on the Aphides or plant lice. They have the power of discharging from the joints of their limbs a yellow fluid which has a disagreeable, penetrating odour. The *Endomychidæ* are chiefly found on fungi in forests and damp places and are numerous in individuals.[1]

[1] To the student I would recommend Lacordaire's Coleoptères with continuation, 12 vols., Paris, 1854-76, as the most comprehensive, most recent and careful of all the works on beetles. From a study of it and the references given in the foot-notes, he will be able to find out for himself where to look for information. I have endeavoured to give some hints in this respect in the references at foot of the list of each family, but it would be beyond the scope of the present work to do more. There is no royal road to the study of Entomology and, as regards Indian insects, the difficulties are very great and are considerably enhanced by the action of writers who think that they advance the interests of science by altering names on some pretence or another and only succeed in disheartening those who are anxious to aid them. Namegrubbing, altering and restoring is that part of the work which is of the least possible practical or mental value. The following works will also be found useful:—

Spécies général des Coleoptères de la collection de M.le Comte Dejean. Paris, 1825-39.

Observationes nonnullæ in Coleoptera Indiæ Orientalis by Perty, Munich, 1831.

Annulosa Javanica by MacLeay and Horsfield. London, 1848.

Synopsis of Nepal Insects (Coleoptera by Hope). Gray's Zool. Misc. I. London, 1831.

Types of Coleoptera, British Museum series by C. O. Waterhouse. London, 1879.

COLEOPTERA.—Beetles.

I.—Pentamera: five-jointed.

A.—GEODEPHAGA.

Family *Cicindelidæ*—Tiger-beetles.

Cicindela, *Linn.*—Princeps [=fasciata, *Hope:* aurofasciata, *Guér.*], *Vigors:* Colon, *Klug:* triramosa, acuminata, superba, *Kollar:* aurovittata, chloropus, tremula, *Brullé:* hymalaica (Kash.) *Redt.:* dives, *Gory:* quadrimaculata, *Aud.:* Candei, doriolineata, speculifera, anchoralis, psammodroma, niveicincta, *Chevrol.:* Prinsepsii, *Saund.:* variipes, octogramma, intermedia, grammophora, imperfecta, albopunctata leucoloma, striatifrons, dromicoides, viridilabris, chlorochila, tetraspilota, *Chaudoir:* viridula, *Quens.:* catena, *Oliv.:* assamensis, latipennis (As.), Hopei, (As.); (Calochroa) Shivah, *Parry:* octonotata, equestris, bicolor, 6-punctata (Mad., Cal.), *Hope.*

(Abroscelis) tenuipes, upsilon, longipes, *Hope.*

(Catoptria) speculifera, *Guér.*

(Ænictomorpha) analis, *Fabr.*

Tetracha, *West.*—euphratica (Cen. I.), *Oliv.*

Apteroessa, *Hope.*—grossa (Mad.), *Fabr.*

Tricondyla, *Latr.*—connata (=aptera Dej.), *Lam.*

Collyris, *Fabr.*—attenuata (Kash.), *Redt.:* ruficornis flavitarsis, *Brullé:* maculicollis, *Chaud.*

References.

Westwood.—Mod. class. Ins. I. 47. 1839.

Lacordaire.—Spéc. Gén. I., 1, 1854. Indian species; *Chevrolat*, Rev. Zool., 1845, p. 95: *Chaudoir*, Bull. de Moscow, 1850, p. 11: 1852, p. 4: *Parry*, Trans. Ent. Soc., IV., 84: *Hope*, An. Mag. N. H., n. s., IV., 169.

Family *Carabidæ*—Ground-beetles

Omophron, *Latr.*—vittatum, pictum, *Wied.*: maculosum, *Chaud.*

Nebria, *Latr.*—Xanthacra (Him.), *Chaud.*

Carabus, *Linn.*—lithariophorus (Mus.), Boysii (N. I.), *Tatum*: Wallichii (As.), *Hope*: cashmiricus (Kash.), *Redt.*

Calosoma, *Web.*—nigrum (As.), *Parry*: chinense, *Kirby*: indicum, orientale (Bom.), *Hope.*

Hexagonia, *Kirby*—terminata, *Kirby.*

Trigonodactyla, *Dej.*—cephalotes, *Dej.*: proxima, *Lap.*

Casnonia, *Latr.*—bimaculata (Kash.), *Redt.*: fuscipennis, *Chaud.*

Ophionea, *Esch.*—cyanocephala (Ben.), *Fabr.*

Drypta, *Fabr.*—crenipes, *Wied.*: pallipes, virgata, amabilis, *Chaud.*: mandibularis, *Lap.*

Galerita, *Fabr.*—attelaboides, *Fabr.*

Omphra, *Leach*—hirtus, *Fabr.*: pilosus, atratus, *Klug*: complanata, *Reiche.*

Pheropsophus, *Sol.*—quadripustulatus, stenoderus, amœnus, lissoderus, lineifrons, *Chaud.*

Brachinus, *Web.*—pictus (Bom.), *Hope*: Girioneri, *Eyd.*: figuratus, *Chaud.*

Mastax, *Fisch.*—histrio, *Fabr.*: pulchellus, *Dej.*: longipalpis, *Wied.*

Calleida, *Dej.*—Boysii, (N. I.), *Chaud.*

Cymindis, *Latr.*—quadrimaculata (Kash.), *Redt.*: stigmula, *Chaud.*

Metabletus, *Sch.*—obscuroguttatus (=spilotus, *Dej.*), (Him.), *Daft.*

Lionychus, *Wis.*—holosericeus (N. I.), *Chaud.*

Lebia, *Latr.*—princeps, Boysii, basalis, *Chaud.*: atra, *Lap.*: brunnea, longithorax, *Wied.*

Promecoptera, *Dej.*—marginalis (Ben.), *Wied.*

Tetragonoderus, *Dej.*—trifasciatus, discopunctatus, *Chaud.*

Masoreus, *Zieg.*—orientalis, opaculus, sericeus, pleuronectus, *Dej.*

Plochionus, *Dej.*—nigrolineatus (Ben.), *Chaud.*

Catascopus, *Kirby.*—nitidulus, *Lap.:* Withillii, *Hope:* elegans, *Chaud.*

Siagona, *Latr.*—pubescens (Ben.), *Chaud.*

Luperca, *Lap.*—lævigatus (Dec.), *Fabr.*

Anthia, *Web.*—orientalis, *Hope.*

Scapterus, *Dej.*—Guerinii, *Dej.*

Clivina, *Latr.*—memnonia, lobata, *Dej.:* assamensis, indica, striata, extensicollis, melanaria, bengalensis, ephippiata, *Putz.*

Craspedophorus, *Hope.*—geniculatus, chalcocephalus, *Wied.:* chlorocephalus, *Koll:* transversalis, bifasciatus, *Lap.*

Diaphoropsophus, *Chaud.*—Mellyi (Ben.), *Chaud.:* concinnus (Ben.), *Laf.*

Rhopalopalpus, *Laf.*—pæciloides (N. I.), *Laf.*

Chlænius, *Bon.*—porcatus, *Gory:* neelgheriensis, *Guér.:* janthinus (Kash.), *Redt.:* flavofemoratus, *Lap.:* nepalensis, Sykesii (Bom.), *Hope.*

Hololeius, *Laf.*—nitidulus, *Dej.*

Oodes, *Bon.*—vivens, *Wied.:* sulcatus, *Esch.*

Badister, *Clairv.*—thoracicus, rubidicollis, 5-pustulatus, *Wied.*

Idiomorphus, *Chaud.*—Guerinii (N. I.), *Chaud.*

Pachytrachelus, *Chaud.*—cribriceps (N. I.), *Chaud.*

Barysomus, *Dej.*—Gyllenhalii, semivittatus, *Dej.*

Harpalus, *Latr.*—quadricollis (Kash.), *Redt.*

Anoplogenius, *Chaud.*—discophorus (N. I.), *Chaud.*

Trigonotoma, *Dej.*—viridicollis, planicollis, *Dej.*

Eccoptogenius, *Chaud.*—mæstus (N. I.), *Chaud.*

Catadromus, *Mach.*—tenebrioides, *Oliv.*

Feronia, *Latr.*—nepalensis, *Hope.*

Strigia, *Brullé*—maxillaris, *Brullé.*

Sphodrus, *Clairv.*—indus (Him.), *Chaud.*

Calathus, *Bon.*—angustatus (Kash.), *Redt.*

Euleptus, *Klug.*—ooderus (Him.), *Chaud.*

Dicranoncus, *Chaud.*—femoralis (Him.), *Chaud.*

Callistus, *Bon.*—coarctatus (N. I.), *Laf.*

Lasiocera, *Dej.*—orientalis (N. I.), *Chaud.*

Bembidium, *Latr.*—indicum (Him.), *Chaud.*

References.

Westwood.—Mod. class. Ins. I., 57. 1839.

Lacordaire.—Spéc. Gén I., 34, 1854. Indian species; *Chaudoir*, Bull. de Moscow, 1842-52: *Wiedemann* Mag. Zool. I., 2, 69: II. 58, 60: Dejean's catalogue, 1825-31. *Parry.* An. Mag. N. H., n. s, XIV., 454.

B.—HYDRODEPHAGA.

Family *Dytiscidæ*—Diving-beetles.

Hyphydrus, *Illig.*—lyratus, *Swartz.*

Hydroporus, *Clairv.*—quadricostatus (Bom.), *Aubé.*

Hydrocanthus, *Say.*—luctuosus, *Aubé.*

Laccophilus, *Leach.*—parvulus (Bom.), flexuosus (Mad.), *Aubé.*

Colymbetes, *Clairv.*—lineatus (Kash.), *Redt.*

Cybister, *Curtis.*—limbatus (As.) *Fabr.:* Guerinii (Nep.), bengalensis, indicus, Dejeanii (Mad.), posticus, bisignatus, *Aubé:* tripunctatus, *Oliv.:* comptus, pauperculus, *White:* bimaculatus (Nep.) *Hope:* rugulosus (Kash.), *Redt.*

Hydaticus, *Leach.*—vittatus, *Fabr.:* festivus, *Ill.:* Fabricii, *Macl.:* signatipennis, Dejeanii (Mad.) *Aubé.*

References.

Erichson.—Genera Dytiscorum. Berlin, 1832.

Westwood.—Mod. Class, Ins. I., 95, 1839.

White.—Nomenclature of the Hydrocanthari in the British Museum, 1847.

Aubé.—Spéc. Gén. des Hydro. et des Gyr. Paris 1839 (VIth volume of Dejean).

Lacordaire.—Spéc. Gén., I., 403, 1854.

Family *Gyrinidæ*—Whirligigs.

Gyrinus, *Geoff.*—nitidulus, *Fabr.*: indicus, *Aubé.*

Orectochilus, *Esch.*—gangeticus, *Wied.*: semivestitus (Ben.), *Guér.*: specularis, *Aubé.*

Dineutus, *Macl.*—australis, spinosus (Mad. Nep.), *Fabr.*: subspinosus, *Klug*: Comma, *Thun.*: ciliatus, *Forsk.*: indicus (Nep.), unidentatus, *Aubé.*

References.

Lacordaire.—Spéc. Gén., I., 433, and as in preceding.

C.—PHILHYDRIDA.

Family *Hydrophilidæ*—Water-lovers.

Hydrophilus, *Geoff.*—olivaceus (Mad.), *Fabr.*: viridicollis (Kash.), cashmiriensis (Kash.), *Redt.*

Sternocophus, *Solier.*—rufipes (As.) *Fabr.*

Family *Hydrobiidæ.*

Amphiops, *Erichs.*—gibbus, *Illiger.*

Family *Sphæridiidæ.*

Cyclonotum, *Erichs.*—orbiculare, abdominalis, *Fabr.*: capense, *Dej.*

References.

Westwood.—Mod. Class. Ins. I., 111, 1839.

Lacordaire.—Spéc. Gén., I., 443, 1854.

Mulsant.—Hist. Nat. des Col. de France (Palpicornes): Paris, 1844.

D.—NECROPHAGA.

Family *Paussidæ.*

Cerapterus, *Sweder.*—latipes (Ben.), *Swed.*

Ceratoderus, *West.*—bifasciatus (Morad.), *Kollar.*

Merismoderus, *West.*—Bensoni (N.-W. P.), *West.*

Platyrhopalus, *West.*—denticornis (N.-W. P.) *Donov.*: angustus (Mus.); unicolor; acutidens (Nep.); Mellii (Mad.); suturalis (Mhow); aplustrifer (Ben.) *West.*: Westwoodii (Ben.), *Saund.*: intermedius (N. I.), *Benson.*

Paussus, *Linn.*—pilicornis (Mus.) ; thoracicus (N. I.) ; Fichtelii (Ben. Him.), *Donov.:* nauceras (Him.), phloiophorus (Mus.) ; Baconis (N. I.), *Benson:* tibialis (Ben.) ; Hearseyanus (Benares) ; Hardwickii (Almora) ; Saundersii (N. I.) ; Boysii (Mhow) ; denticulatus (N. I.) ; cognatus (Ben.) ; fulvus ; Stevensianus (N. I.) ; politus (N. I.) ; rufitarsis (N. I.), Jerdoni, *West.*

References.

Westwood.—Mod. Class, I., 150, 1839 : Monograph of the Paussidæ, Arc. Ent., II., 1, 37, 161 (1845) : Cab. Or. Ent. t. 41 : An. Mag. N. H. n. s. VII. 533 : VIII. 449. X. 409.

Lacordaire.—Spéc. Gén., II., 1, 1854. Indian Species ; Benson, Cal. J. N. H. Donovan. Ins. India, t. 4, 5. Boyes J. A. S. Ben. XII. 421.

Family *Silphidæ*—Shield-beetles.

Silpha, *Linn.*—osculans (=Diamesus osculans, *Hope*), (Ben.), *Vigors:* chloroptera (=tetraspilota, *Hope*) (Bom.), *Lap.:* ioptera (Kash.), *Redt.*

Apatetica, *West.*—lehioides (Him.), *West.*

Catops, *Paykull*—vestitus (N. I.), *Murray.*

References.

Westwood.—Mod. Class. Ins. I. 135, 1839 : Cab. Or. Ent. t. 41.

Lacordaire.—Spéc. Gén., II., 192, 1854.

Family *Nitidulidæ.*

Carpophilus, *Leach.*—obsoletus, *Erichs.*

References.

Westwood.—Mod. Class, I. 140, 1839.

Lacordaire.—Spéc. Gén., II., 287, 1854.

Murray.—Monograph of the Nitidulidæ. 1864.

Family *Trogositidæ.*

Alindria, *Erichs.*—orientalis (Kash.), *Redt.*

Melambia, *Erichs.*—crenicollis (Ben.), Guér.

References.

Westwood.—Mod. Class, I., 145, 1839.

Lacordaire.—Spéc. Gén., II., 332, 1854.

Family *Colydiadæ.*

Meryx, *Latr.*—rugosa, *Latreille.*

Reference.

Lacordaire.—Spéc. Gén., II., 352, 1854.

Family *Cucujidæ.*

Hectarthrum, *New.*—bistriatum, *Lap.:* heros, rufipennis, Fabr.: brevifossum, *New.;* depressum, *Smith.*

Ancistria, *Erichs.*—cylindrica, West.

Cucujus, *Fabr.*—bicolor (Nep.), *Smith.*

Læmophlæus, *Dej.*—sanguinolentus (Nep.) *Hope:* concolor, obsoletus, *Smith.*

References.

Westwood.—Mod. Class, Ins., I., 148, 1839. Cab. Or. Ent. *t.* 41.

Smith, F.—List of the Cucujidæ in the British Museum, 1851.

Lacordaire.—Spéc. Gén., II., 390, 1854.

Family *Dermestidæ.*

Dermestes, *Linn.*—lardarius (bacon-beetle, Nepál), *Linn.:* cadaverinus, *Fabr.*

E.—BRACHELYTRA.

Family *Staphylinidæ.*

Myrmedonia, *Erich.*—ochraceus (Him.), *Hope.*

Tachinus, *Graven.*—melanarius (Ben.), *Erich.*

Platyprosopus, *Mann.*—tamulus (Mad.), fuliginosus (Ben.) *Erich.*

Palæstrinus, *Erich.*—Sykesii, mutillarius (Ben.), *Erich.*

Caranistes, *Erich.*—Westermanii (Ben.), *Erich.*

Staphylinus, *Linn.*—cinctus (Kash.), *Redt.*

References.

Westwood.—Mod Class. Ins. I. 161, 1839: An. Mag. N. H. n. s VII, 149.

Erichson, G.—Gen. et Spéc. Staphylinorum. Berlin, 1839-40.

Lacordaire.—Spéc. Gén. II. 17, 1854.

F.—CLAVICORNES.

Family *Histeridæ*—Mimic-beetles.

Platysoma, *Leach.*—atratum (Ben.), *Er.*

Hister, *Linn.*—bipustulatus, *Fabr.:* orientalis, *Payk.:* distortus, *Ill:* punctulatus, bengalensis, *Wied.:* melanarius, pallatus, coracinus, scævola, lutarius, *Er.:* parallelus (Kash.), *Redt.*

Notodoma, *de Mars.*—globatum (Mad.), *Mars.*

Cypturus, *Erich.*—ænescens (Ben.), *Erich.*

Saprinus, *Erich.*—4-guttatus, *Fabr.*: speciosus, cupreus, *Erich.*

References.

Westwood.—Mod. Class, Ins., I. 181, 1839.

Lacordaire.—Spéc. Gén., II., 242, 1854.

G.—LAMELLICORNES.

Family *Lucanidæ*—Stag-beetles.

Lucanus, *Fabr.*—lunifer [=Lama, Burm.: var. ♂ = villosus, *Hope*], (Him.); Cantori (As.); Forsteri, (As.); MacClellandii (As.); Buddha (As.); Brahminus (As.); Rafflesii (As.); Mearesii [♀ =nigripes, *Hope*], (As.); Parryi [♀ =serricollis, *Hope*], (As.); Baladeva (As.); platycephalus (As.); *Hope:* Gazella [♀ =Delessertii, Guér. and ♂ =Cuvera, Prinsepii, Burmeisteri (Mad.), castanopterus (Nep.), *Hope*], (Nep.), *Fabr.:* multidentatus (As.), inquinatus, Jenkinsii (As.), strigiceps (Him.), *West.:* bicolor (Nep.), *Oliv.:* carinatus (♂ =alces *Oliv.:* var. ♂ = dux, *West.;* camelus, *Oliv*), *Linn.*

Dorcus, *MacL.*—nepalensis [var. ♂ =similis, *Hope;* Chevrolatii, *Chenu;* Parryi, *Hope*], (Nep.); Rafflesii (As.); MacLeayii: Spencei, (As.): bulbosus (As.); bengalensis; curvidens, (As.); parallelus; Eschscholtzii; lineato-punctatus Blanchardi (As.); Tityus (As.); astacoides; (As.); foveatus (As.); Westermanni (As.), de Hahnii (As.), punctilabris (As.); omissus (As.); *Hope:* Giraffa [var. ♂ =Downesii, Confucius, *Hope*]: Saiga [♂ =Reichii, *Hope;* ♀ =vitulus, *Hope*], (As.), *Olivier:* bucephalus [♂ =Briareus, *Hope;* ♀ =rugifrons, *Hope*], (As.); bubalus, (As.), *Perty:* cribriceps (=molossus, *Hope*), *Chevrol.:* malabaricus, *West.*

Figulus, *MacL.*—confusus (Him.), *West.*

References.

Westwood.—Mod. Class, I., 185, 1839: Cab. Or Ent. t. 8, 10, 26. An. Mag. N. H. n. s. VIII. 124.

Lacordaire.—Spéc. Gén. III. 4, 1856.

Hope.—Catalogue of Lucanoid Coleoptera. 1845: Royles Him.: Gray Zool. Misc.: Trans. Linn. Soc., XVIII. 587: XIX 105 and An. Mag. N. H. VI. 299; VIII. 302: IX. 247, XII. 363.

Family *Copridæ*—Dung-beetles.

Ateuchus, *Weber.*—sanctus (Mad.) *Fabr.*: gangeticus, Brahminus, *Lap.*: convalescens, costatus, *Wied.*: devotus (Kash.) *Redt.*

Sisyphus, *Latr.*—neglectus, *Gory*: histus, *Weid.*: cashmiriensis, *Redt.*

Gymnopleurus, *Ill.*—miliaris, cyaneus (Mad.) Leei, Kœnigii (Mad.) granulatus, Hellwigii (Mad.) sinuatus, *Fabr.*: mundus, exanthema, *Wied.*: opacus (Kash.) *Redt.*: Dejeanii, capicola, sumptuosus, indicus, impressus, *Lap.*

Copris, Geoff.—Sabæus (Mad.), nanus (Mad.), Midas, capucinus, Bucephalus, orientalis, fricator, *Fabr.*: 6-dentata (Kash.), Sacontala (Kash.), *Redt.*

Onthophagus, *Latr.*—Pithecius, seniculus (Mad.), metallicus, pardalis, Pirmal, pygmæus (Mad.), parvulus, Catta (Mad.), bifasciatus (Mad.), dromedarius, 4-dentatus, tarandus, unifasciatus (Mad.), Bonasus, pallipes, Corvus, Ibex, nuchidens (Mad.), Tragus (As.), Antilope, fuscopunctatus, Dama, vitulus, Mopsus, spinifex (Mad.), æneus (Mad.), centricornis (Mad.), unicornis (Mad.), furculus, 4-cornis (Mad.), lævigatus, politus (Mad.), aterrimus pusillus, *Fabr.*: erectus obtusus, 3-cornis, punctulatus, divisus, ænescens, ramosus, tricerus, lamina, trituber, bicuspis, setosus, hircus, troglodyta, luteipennis, *Wied.*: igneus, *Vigors*: suturatus, *Germ.*: Elliotti (Mad.), imperator, tigrini, *Lap.*: phanæoides (Him.), *Hope*: difficilis, *Le Gu.*: Brama (Kash.), angulatus (Kash.), excavatus (Kash.), *Redt.*

Oniticellus, *Zieg.*—Rhadamistus (Mad.) femoratus, cinctus (As.), *Fabr.*: Diadema, pictus, niger, *Wied.*

References.

Westwood.—Mod. Class, I, 208, 1839.

Lacordaire.—Spéc. Gén., III., 61, 1856. Indian species: Fabricius, *passim.*

Family *Aphodiidæ.*

Aphodius, *Ill.*—sorex, elongatulus, analis, obsoletus, mæstus, marginellus (Mad.), atricapillus, impudicus, *Fabr.*: elegans, *All.*: diadema, cornutus, discus, rufopustulus, *Wied.*: hirtipes (Kash.), gonagricus (Kash.), *Redt.*: irregularis (Him.), *Hope.*

Chatopisthes, *West.*—fulvus (Him. Cen. I), *West.*

Chiron, *MacL.*—sulcithorax, *Perty*: digitatus, *Fabr.*: assamensis, *Hope.*

References.

Westwood.—Mod. Class, Ins, I, 207, 1839.

Lacordaire.—Spéc. Gén., III., 112, 1856.

Family *Orphnidæ.*

Orphnus, *MacL.*—bicolor, *Fabr.*: mysorensis, picinus (Ben.), impressus (Cen. I.), nanus (Cen. I.), *West.*

Ochodæus, *Meg.*—chrysomelinus, *Fabr.*: lutescens, pictus, *West.*

References.

Westwood.—On certain Lamellicorn beetles. Trans. Ent. Soc. IV., 155: II., 2nd Ser., 59.

Lacordaire.—Spéc. Gén., III., 127, 1856.

Family *Hybosoridæ.*

Hybosorus, *MacL.*—orientalis, *Hope*: Roei, *West.*

Phæochrous, *Lap.*—emarginatus, *Lap.*: dubius, indicus, *West.*

References.

Westwood.—Trans. Ent. Soc, IV., 160. An. Mag. N. H. n. s. XI., 315.

Lacordaire.—Spec. Gen, III., 132, 1856.

Family *Geotrupidæ*—Dor-beetles.

Athyreus, *Mac-Leay.*—orientalis, *Lap.:* frontalis (As.), *Parry.*

Bolboceras, *Kirby.*—Cyclops (As. Cen. I.) *Fabr.:* sulcicollis, impressus, *Wied.:* grandis, Calanus (Bom), indicus (Cen. I.), *Hope:* ferrugineus, carenicollis, *Lap.:* Laportei [=ferrugineus, Lap], Westwoodii [=furcicollis, West.], *Hald.:* lævicollis; lateralis (Bom.); capitatus (As.); inæqualis; bicarinatus; dorsalis; nigriceps; transversalis, *West.*

Geotrupes, *Latr.*—orientalis (Him.), *Hope.*

References.

Westwood.—Mod. Class, I., 201, 1839. Trans. Linn. Soc. XX., 453: An. Mag. N. H. n. s. XIV., 454: XV., 438.: 2nd Ser. II., 143, 353.

Lacordaire.—Spéc. Gén. III. 138, 1856.

Family *Passalidæ.*

Ceracupes, *Kaup*—Austeni (As.), *Stol.*

Tæniocerus, *Kaup*—bicuspis (As.), *Kaup.*

Pleurarius, *Kaup*—brachyphyllus (Níl.), *Stol.*

Leptaulax, *Kaup*—dentatus, bicolor (As.), *Fabr.*

Aceraius, *Kaup*—grandis (As.), *Burm.:* emarginatus (As.). *Fabr.*

Basilianus, *Kaup*—cancrus (As. Nep.), *Perch.:* neelgheriensis (Níl.), *Guér.:* Cantoris (As.), *Hope:* indicus (Níl.), assamensis, *Stol.*

Passalus, *Fabr.*—fronticornis (Tib.), *West.*

References.

Percheron.—Monographie des Passalides, Paris, 1835.

Westwood.—Mod. Class. Ins. I. 186, 1839: An. Mag. N. H. n. s. VIII., 124.

Smith, F.—Catalogue of Passalidæ in the British Museum, 1852.

Lacordaire.—Spéc. Gén., III., 44, 1856.

Kaup.—Monograph, Berlin Ent. Zeit., XV., 1871.

Stoliczka.—On Indian Passalidæ. J. A. S. Ben. XLII, ii., 149, 1873.

Family *Melolonthidæ*—Cockchafers.

Serica, *MacL.*—mutabilis (Mad.), *Fabr.:* marmorata, umbrina, indica, iridescens, rufocuprea, costigera, ferrugata, brevis, granuligera (Ben.), *Blanch.:* immutablis, *Schön.:* marginella, bimaculata, *Hope:* ferruginea (Kash.), *Redt.*

Apogonia, Kirby—rauca (Mad.), ferruginea (Ben.), *Fabr.*

Ancylonycha, *Blanch.*—serrata (Mad.), *Fabr.*: sculpticollis, puberina, longipennis. (Ben.), Reynaudii, Perrottetii, consanguinea, *Blanch.*: mucida, *Schön.*:

Schizonycha, *Erichs.*—ruficollis (Mad.) *Fabr.*: fuscescens, xanthodera (Ben), *Blanch.*: cylindrica, *Schön.*: cribricollis (Kash.), *Redt.*

Brahmina, *Blanch.*—Calva (Ben.), comata (Ben.), *Blanch.*

Anoxia, *Lap.*—indiana (N. I.), *Blanch.*

Leucopholis, *Blanch.*—candida, Oliv.: lepidophora, niveosquamosa, *Blanch.*

Lepidiota, *Hope*—bimaculata (= Griffithii, *Hope*), *Saund.*: punctatipennis, sticticoptera, rugosipennis, luctuosa, impluviata, *Blanch.*

Euchirus, *Kirby*—Mac Leayii (Nep. As.), *Hope.*: longimanus, *Oliv.*: Parryi (Darj.), *G. Gray.*

References.

Westwood.—Mod. Class. Ins. I. 216, 1839. Cab. Or. Ent. *t.* 1.

Lacordaire.—Spéc. Gén. III. 169, 1856. Indian species; *Blanchard*, Cat. des Col. du Mus. d' Hist. Nat. de Paris. Paris, 1850-51: *Hope*, An. Mag. N. H. n. s. III. 17, 171, VI. 300.

Family *Rutelidæ.*

Rhinyptia, *Dej.*—indica, *Burm.*

Dinorhina, *Lac.*—orientis, *New.*

Anomala, *Köppe*—fraterna (var. pallida, *Oliv.*), communis, *Burm.*: dorsalis (Mad.), elata (Mad.), *Fabr.*: pallidicollis, pallida, rugipennis, bengalensis, testacea, fulgens, striolata, ignicollis, lineatopennis, Duvaucelii, elegans, fulviventra, *Blanch.*: strigata, *Lap.*: variocolor, *Schön.*: ypsilon, *Wied.*

Euchlora, *Mac L.*—Dussumieri, cribrata, obsoleta, malabariensis, xanthoptera, *Blanch.*: grandis, MacLeayana, perplexa, de Hahnii, dimidiata, sulcata, Cantori, aureola, *Hope*: vittata (Kash.), *Redt.*

Mimela, *Kirby*—Leii, *Swed.*: MacLeayana, *Vigors*: concolor, heterochropus, pectoralis, fulgidivittata, *Blanch*: splendens, auronitens, Horsfieldii, chrysoprasis, bicolor, similis, princeps, decipiens, pyroscelis, glabra, Passerinii (Him.), xanthorina, *Hope*: sapphirina (As.), *Parry*.

Popillia, *Latr.*—nitida, cyanea [=concolor, *Lap.*; var.=beryllina, *Hope*], minuta, marginicollis, cupricollis [var. formosa, smaragdula, suturata, *Hope*], virescens, *Hope*: reginæ [=splendida, Guér.], nasuta, acuta, rugicollis, mutans, fimbriata, chlorion, Adamas, complanata, lucida, difficilis, varia (As.), gemma (As.) *Newman*: sulcata (Kash.), truncata (Kash.), cashmiriensis, *Redt.*

Peperonota, *West.*—Harringtonii (Him.), *West.*

Parastasia, *West.*—rufopicta (As.), *West.*

Didrepanephorus, *Wood M.*—bifalcifer (As.), *Wood-M.*

Adoretus, *Lap.*—Boops, *Wied.*: caliginosus, *Burm.*: concolor Duvaucelii, latifrons, ovalis, pallens, limbatus, *Blanch*: femoralis, *Duf.*

Heterophthalmus, *Blanch.*—ocularis, *Blanch.*

References.

Westwood.—Mod. Class. Ins. I. 213: An. Mag. N. H. n. s. VII. 204: X. 68: Cab. Or. Ent. t. 17.

Lacordaire.—Spéc. Gén. III. 318, 1856. Indian Species; *Blanchard*, Cat. Col. de Mus. de Paris: *Hope*, Gray's Zool. Mis. I. 23: Trans. Ent. Soc. I. 108, 114: An. Mag. N. H. n. s. III. 17, 171: IV. 345: IX. 247: XI. 62: XIV. 454 (Parry). *Newman*, *Ibid*, II, 336, 392: III. 365. Trans. Ent. Soc. III. 32.

Family *Dynastidæ*.

Peltonotus, *Burm.*—morio, *Burm.*

Horonotus, *Burm.*—Dædalus, (♂ =xanthus, *Oliv.*; ♀ =diadema, *Oliv.*), *Fabr.*

Phyllognathus, *Esch.*—Dyonisus (Mad.), *Fabr.*

Oryctes, *Ill.*—Rhinoceros, *Linn.*

Trichogomphus, *Burm.*—lunicollis, *Burm.*: Bronchus, *Herbst.*

Dichodontus, *Burm.*—coronatus, *Burm.*

Eupatorus, *Burm.*—Hardwickei (Nep.), Cantori (As.), *Hope.*

Chalcosoma, *Hope.*—Atlas (Him.), *Linn.*

References.

Westwood.—Mod. Class. Ins. I. 191 : Cab. Or. Ent. *t.* 13.

Lacordaire.—Spéc. Gén. III. 387, 1856. Boyes' figure in J. A. S. Ben. XII. 436 is *E. Hardwickei*, Hope.

Family *Cetoniidæ*—Rose-beetles.

Narycius, *Dup.*—opalus (Mad.), *Dupont.*

Cyphonocephalus, *West.*—smaragdulus, *West.*

Dicronocephalus, *Hope.*—Wallichii (Nep.), *Hope.*

Rhomborhina, *Hope.*—(Jumnos) Ruckeri (Him.), *Saund :* (Jumnos) Roylei (Him.), *Hope :* opalina (Nep.), Mellyi [=dives, *West*], (Nep.), *G. et P.:* hyacinthina (As.), *Hope:* apicalis [=distincta, *Hope*], (Nep.) ; microcephala (Him.), *West.*

Heterorhina, *West.*—A (Trigonophorus, *Hope*)—Delessertii (Him.), *Guér.:* gracilipes (Him.), Saundersii (Him.), *West.:* Hardwickei [=nepalensis, *West.*], (Him.), *Hope.*

B (Anomalocera, *Hope*)—Parryi [♂ =Mearseii, *Hope*] (Him.), *Hope:* glaberrima [=hirtiventris, *Redt.*], (Him.), *West.*

C (Coryphocera, *Burm.*)—Hopei [♀ =bengalensis, *West.;* affinis, *Redt.* and ♂ =Hopei, melanaria, dorsalis *G. et P.*], (Nep), *West.:* elegans [anthracina, *West.:* micans, *Guér.:* cuprea, *Herbst :* Feisthamelii, *G. et P.*] (Mad.), læta (As.) *Fabr.:* nigritarsis (Nep.), amæna (As.), Cuvera (Bom.), *Hope:* olivacea, *Guér.:* sinuaticollis, *Schaum :* bimacula [= confusa, *West*] (Ben.), *Wied.:* punctatissima [jucunda, Hope], (As.) ; tibialis (N. I.), Childrenii (Ben.), *West.;* coxalis (Nep.), *Blanch.*

D (Diceros, *G. et P.*)—bicornis (As.), *Latr.:* ornata (Mad.), *Burm.*

E (Mystroceros, *Burm.*)—dives, *West.*

Clinteria, *Burm.*—guttifera, hilaris (N. I.), spuria, *Burm.:* confinis (N. I.), flavonotata, *G. et P.:* modesta (Ben.), flavopicta (Ben.), *Blanch.:* Hearseana (Ben.), *West.:* Klugii (N. I.), spilota (N. I.), *Hope:* ducalis (As.): Hoffmeisteri (N. I.), *White:* pumila (Ben.), *Schön.:* cœrulea, *Herbst.*

Agestrata, *Esch.*—chinensis [♂ = Withillii (Bom.), and ♀ = Gagates (Mad.), *Hope*], *Fabr.*

Macronota, *Wied.*—dives [penicillata, *Hope;* Mearesii, Parry], (Mad., N. I.); flavomaculata (Mad.); malabariensis (Mad.); elongata (Cal.), resplendens (Ben.), *G. et P.:* vittigera (Mad.), tetraspilota (Mad. Púna), stictica (Mys.), *Hope:* alboguttata (N. I.), *Parry:* picta, *Guér.:* 5-lineata, *Hoff.*

Bombodes, *West.*—ursus (Him.), *West.*

Euryomia, *Burm.*—viridiobscura (N. I.), Bealiæ (Ben.), *G. et P.:* tricolor, *Oliv.:* versicolor (N. I.); albopunctata, *Fabr.:* marginicollis [= Horsfieldii, *Hope;* torquata, *Fabr.*] (Nep. As.), *Gory:* bivittata (Tib.), *Burm:* Gravenhorstii, *Hope:* aurulenta, *White.*

Anoplochilus, *Mac L.*—castanopterus (Bom.) *Burm.:* terrasus, *G. et P.:* brunneocupreus, cænosus, argentiferus, *West.*

Anatona, *Burm.*—flavoguttata [stillata, *New.*] (Him. Bom.); alboguttata (Dec.) *Burm.*

Chiloloba, *Burm.*—acuta (Ben.), *Wied.*

Cetonia, *Fabr.*—Dalmani (Nep.); ignipes (Nep.); regalis (Bom.); squamipennis; *Burm.:* difformis (Ben.); maculata (N. I.), mixta (Ben.), *Fabr.:* cupripes, *Wied.:* alboguttata [Saundersii, *Bain.*] (In.), *Vigors:* flavoguttata (Kash.), *Redt.:* neglecta (Nep.), *Hope.*

Anthracophora, *Burm.*—atromaculata, *Fabr.:* Bohemanii, *West.:* gracilis (Mad.), *White.*

Macroma, *G. et P.*—melanopus [nigripennis, *Hope*], (As.), *Schaum:* xanthorhina [bicolor, *G. et P.*], (Nep.), *Hope.*

Centrognathus, *Guér.*—lugubris, *Fabr.*

Spilophorus, *Schaum.*—maculatus [cretosus, *Hope*], (Púna), *Gory.*

Cænochilus, *Schaum.*—platyrhinus, *Sch.:* Campbellii (N. I.), brunneus (N. I.), *Saund.:* glabratus, *West.*

Valgus, *Scriba.*—pygmæus, *G. et P.:* pictus (Nep.), argillaceus (Mad.), *Hope:* podicalis, penicillatus, *Blanch.*

References.

Westwood.—Mod. Class. Ins. I. 221: Arc. Ent. I. 5, 113, 129 and t. 1, 19, 28-36, 42-46. Cab. Or. Ent. *t.* 17. Trans. Ent. Soc. IV.

White.—Cetoniadæ of the British Museum, 1847.

Schaum.—Cat. des Lamellicornes Mélitophiles. An. Soc. Ent. III., 37.

Lacordaire.—Spéc. Gén. III. 464, 1856. Indian species, *Hope.* An. Mag. N. H. n. s. VI. 482: VIII. 302. *Saunders, Ibid,* X. 67.

H.—SERRICORNES.

Family *Buprestidæ*—Metallic-beetles.

Sternocera, *Esch.*—sternicornis, chrysis (Mad. Cal.), *Linn.:* basalis chrysidoides (Mad.), nitidicollis, rugosipennis, Diardi, dissimilis, *Lap. et G.:* unicolor (Mad.), *Lap.:* orientalis, *Herbst:* lævigata, *Oliv.:* dasypleuros (Kash.), *Redt.*

Julodis, *Esch.*—Whithillii, *Hope.*

Catoxantha. *Sol.*—bicolor (As.), *Fabr.:* giganteus (Mad.), *Sch.:* cuprascens, (Mad.), *Water.*

Chrysochroa, *Sol.*—ignita, *Linn.:* ocellata, *Fabr.:* mutabilis, *Oliv.:* Edwardsii (As.), Plutus, *Hope:* assamensis, *Guér.:* caroli (Mad.), *Perr.:* Rajah (Bom.), chinensis (As.), pectinicornis (Mad.), *Lap. et G.:* bivittata (As.) *Gray:* sublimata (N. I.), *White.*

Chalcophora, *Sol.*—elegans, *Fabr.:* Blanchardi (Bom.), eximia, sumptuosa, Sonneratii, smaragdula, aurifera, *Lap. et G.*

Latipalpis, *Sol.*—fastuosa (Nep. Mad.), *Fabr.*

Pæcilonota, *Esch.*—gentilis, *Lap.*: hilaris, *White.*

Buprestis, *Linn.*—10-spilota (Nep.), *Hope.*

Cinyra, *Lap.*—auricollis, *Lap.*

Castalia, *Lap.*—bimaculata, *Oliv.*

Ptosima, *Sol.*—amabilis, *Lap.*

Acmæodera, *Esch.*—aurifera (Dec.), *Lap.*

Sphenoptera, *Sol.*—ænea (Mad.) *Fabr.*

Belionota, *Esch.*—scutellaris, *Fabr.*

Corœbus, *Lap.*—Smeei (Mad.), *Lap.*: hastanus (Ben.), *Sch.*: nigropictus, *Lap.*

Discoderes, *Chevr.*—fasciatum, *Guér.*: grisator, *Lap.*

Agrilus, *Curtis.*—armatus, *Fabr.*: cashmiriensis, *Redt.*

Trachys, *Fabr.*—indica, *Hope.*

References.

Westwood.—Mod. Class. Ins., I. 226.

Lacordaire.—Spéc. Gén. IV., 1, 1857.

White, A.—Nomenclature of Buprestidæ in the British Museum, 1848.

Laporte de Castelneau et Gory—Hist Nat. des Coleoptéres.

Family *Eucnemidæ.*

Galbella, *West.*—violacea, *West.*

Reference.

Lacordaire.—Spéc. Gén. IV. 95: Cab. Or. Ent. *t.* 41.

Family *Elateridæ*—Springing-beetles.

Agrypnus, *Esch.*—fuscipes, luridus (Mad.), *Fabr.*

Lacon, *Germ.*—muticus, *Herbst*: brachychætus (Kash.), *Redt.*

Alaus, *Esch.*—mærens, sculptus (As.), *West.*: irroratus (As.), *Parry.*

Campsosternus, *Latr.*—Delessertii (Nil.), *Guér.*: violatus (Ben.), foveolatus (Mad.), *Germ.*: Cantori (As.), Wilsoni (Mad.), Duponti (Mad.), Stephensii (Nep.), smaragdinus (Mad.), *Hope*: Dohrnii (As.), *West.*

Oxynopterus, *Hope.*—Audouini, *Hope.*

Pectocera, *Hope.*—Mellii (Simla), Cantori (As.), *Hope.*

Pachyderes, *Latr.*—rufiicollis (Ben.), *Guér.*

Elater, *Linn.*—cyanopterus (Garhwál), *Hope.*

Cardiophorus, *Esch.*—vicinus (Kash.), consentaneus (Kash., *Redt.*

Penia, *Lap.*—Eschscholtzii (Nep.), *Hope.*

Corymbites, *Latr.*—fuscipennis (Ben.), *Blanch.*: viridis, *Germ.*

Plectrosternus, *Lac.*—rufus, *Latr.*

References.

Westwood.—Mod. Class. Ins. I. 225: Cab. Or. Ent. *t.*35.

Lacordaire.—Spéc. Gén. IV. 130, 1857. *Caud.* Mon. Elateridæ. 1859, *Hope:* An. Mag. N. H. n. s. VIII. 453: XI. 394; XIV. 454.

Family *Lycidæ.*

Macrolycus, *Waterh.*—Bowringü (All.), *Waterhouse.*

Calochromus, *Guérin.*—orbatus (As.), rugatus (All.), ruber (All.), tarsalis (In.), *Waterh.*: apicalis (Nep.), *Hope.*

Lycostomus, *Motsch.*—similis (In.), *Hope:* modestus (As.), ambiguus (As.), singularis (Mad.), striatus (In.), thoracicus (In.), *Waterh.*: analis (In.), *Dalm.*

Plateros, *Bourg.*—fuscipennis (As.), carbonarius (In.), *Waterh.*

Xylobanus, *Waterh.*—foveatus (In.), *Waterh.*

Metriorrhynchus, *Guér.*—sericans (In.), *Waterh.*: lineatus (N.I.), *Hope.*

Conderis, *Waterh.*—major (N. I.), *Waterh.*

References.

Waterhouse.—Types of Coleoptera British Museum, 1879.

Murray.—An. Mag. N. H. 1868, 327.

Family *Malacodermidæ.*

Lyropæus, *Water.*—biguttatus (Mal.), *Water.*

Ditoneces, *Walk.*—obscurus (Mal.), *Water.*

Lamprigera, *Motsch.*—nepalensis (Ben.), *Hope.*

Lampyris, *Geoff.*—marginella (Ben.), *Hope.*

Luciola, *Lap.*—vittata, *Lap.*

Tylocerus, *Dalm.*—bimaculatus (Mus.), *Hope.*

Telephorus, *Schæff.*—melanocephala (Ben.), *Fabr.*: nepalensis, *Hope:* cœruleomaculata (Kash.), *Redt.*

Selasia, *Lap.*—decipiens (Ben.), *Guér.*

Eugensis, *West.*—palpator (Cal.), *West.*

Dodecatoma, *West.*—bicolor (Dec.), *West.*

Agalochrus, *Erichs.*—lætus (Ben.), *Fabr.*

Carphurus, *Erichs.*—transparipennis, nigripennis, *Motsch.*

Prionocerus, *Perty.*—cœruleipennis, *Perty.*

References.

Westwood.—Mod. Class. Ins. I. 242, 1839: Cab. Or. Ent. *t.* 41.

Lacordaire.—Spéc. Gén. IV. 285, 1857.

Family *Ptinidæ.*

Ptinus, *Linn.*—nigerimus, *Boïeld.*

Reference.

Lacordaire.—Spéc. Gén. IV. 508, 1857.

Family *Cleridæ.*

Cylidrus, *Latr.*—cyaneus (Cen. In., Ben.), *Fabr.*

Cladiscus, *Chevrol.*—Parrianus, bipectinatus, *West.:* Prinsepii (N. I.), gracilis (N. I.,) longipennis (N. I.), *White.*

Tillus, *Fabr.*—succinctus, *Dup.:* picipennis, *West.:* notatus, *Klug.*

Opilus, *Latr.*—subfasciatus (Ben.), castaneipennis (Ben.), unicolor, *White.*

Tillicera, *Spin.*—mutillæcolor (N. I.), *White.*

Thanasimus, *Latr.*—abdominalis, *Spinola:* stellatus, subscutellaris, *West.*

Clerus, *Geoff.*—bengala, posticalis, zebratus, *West.*

Thaneroclerus, *Spin.*—Buquetii, *Lefebre.*

Stigmatium, *Gray.*—rufiventre (As.), *West.*

Tenerus, *Lap.*—signaticollis (Cen. In.), *Lap.*

Necrobia, *Latr.*—rufipes, *Oliv.*: ruficollis, violacea, *Latr.*

Opetiopalpus, *Spin.*—obesus (N. I.), *White.*

References.

Westwood.—Mod. Class. Ins. I. 261, 1839.

Spinola.—Essai sur les Clérites. Geneva, 1844.

White, A.—List of the Cleridæ in the British Museum, 1849.

Lacordaire.—Spéc. Gén., IV., 415, 1857.

II.—HETEROMERA.

A.—TRACHELIA.

Family *Lagriidæ.*

Lagria, *Fabr.*—ærea (Kash.), variabilis (Kash.), bicolor (Kash.), *Redt.*

Family *Pedilidæ.*

Macratria, *New.*—Helferi, concolor, nigella (Ben.), *De la Ferte.*

Family *Anthicidæ.*

Formicomus, *De la Ferté*—consul, prætor, *De la F.*: bengalensis, *Wied.*: ruficollis, *Saund.*

Leptaleus, *De la Ferté*—delicatulus, *De la F.*

Mecynotarsus, *De la Ferté*—nanus (Ben.), nigrozonatus, fragilis, *De la F.*

Octhenomus, *Schm.*—indicus, *De la F.*

Family *Pyrochroidæ.*

Pyrochroa, *Geoff.*—longa, *Perty.*

Family *Mordellidæ.*

Mordella, *Linn.*—tricolor, *Wied.*

Family *Rhipiphoridæ.*

Emenadia, *Lap.*—bipunctatus [=apicalis, Hope] (Garhwál); pusillus, *Fabr.*

Family *Meloidæ*—Oil-beetles.

Mylabris, *Fabr.*—Jacquemontii (Kash.), *Redt.*: pustulata, puncta (Mad.) *Collas*: indica, *Fuss.*: humeralis, proxima, orientalis, *Dej.* cichorii (In.), *Fabr.*

Cantharis, *Geoff.*—cærulea (Ben.), *Leuck.*: ruficollis, testacea, *Fabr.*: ruficeps, *Ill.*: rubriceps (Kash.), limbata (Kash.), *Redt.*: Actæon, Rouxii, ornata, picta, *Lap.*: nipalensis, assamensis, violacea, gigas, *Dej.*

Sybaris, *Steph.*—præustus (Kash.), tunicatus (Kash.), semivittatus (Kash.), *Redt.*

Zonitis, *Fabr.*—pallida, *Fabr.*

Onyctemis, *Lap.*—Sonneratii, *Lap.*

References.

Westwood.—Mod. Class. Ins, I., 286-308, 1839.

Lacordaire.—Spéc. Gén. V., 563-648, 1859.

Gerstæcker.—Mon. Rhipiphoridum. Berlin, 1855.

Newport.—Trans. Linn. Soc., XX., 297, 321.

B—ATRACHELIA.

Family *Tenebrionidæ.*

Microdera, *Esch.*—coromandelensis (Mad.), *Solier.*

Hyperops, *Esch.*—unicolor (Ben.), *Herbst:* indicus, striatopunctatus, *Wied.:* coromandelensis (Mad.), *Solier.*

Stenosida, *Solier*—tenuicollis, *Solier.*

Himatismus, *Erichs.*—fasciculatus, *Fabr.*

Blaps, *Fabr.*—orientalis (Ben.), spathulata (Ben.), punctatostriata (Ben.), *Solier.*

Platynotus, *Fabr.*—striata (Mad.) excavata (Mad.) *Fabr.:* punctatipennis, Deyrollei, perforatus, *Muls.*

Pseudoblaps, *Guér.*—crenatus (Mad.) nigratus, *Fabr.:* Melii, ambiguus, parallelus, strigipennis, polinieri (Mad.), *Muls.:* javanus, *Wied.:* arcuatus, *St. Farg.:* Westermanni, *Mann.*

Scleron, *Hope*—latipes, *Guér.*

Opatrum, *Fabr.*—elongatum, *Guér.*

Bolitophagus, *Ill.*—elongatus, *Perty.*

Hemicera, *Lap.*—splendens, *Wied.*

Uloma, *Meg.*—orientalis, *Lap.*

Latheticus, *Water.*—oryzæ (Cal.), *Water.*

Toxicum, *Latr.*—quadricornis, *Fabr.:* Richesianum, *Latr.*

Cossyphus, *Oliv.*—depressus, *Oliv.:* Edwardsii, *Lac.*

Polposipus, *Sol.*—herculeanus (Ben.), *Sol.*

Lyprops, *Hope*—chrysophthalmus (Ben.), *Hope:* indicus (Ben.), *Wied.*

Scotæus, *Hope*—splendens (As.), *Dej.*

Strongylium, *Kirby*—rufipenne (Kash.), *Redt.*

Phymatosoma, *Lap.*—tuberculatum (Ben.), *Lap.*

Cyriogeton, *Pascoe*—insignis (As.), *Pascoe.*

References.

Westwood.—Mod. Class. Ins., I., 316. 1839.

Lacordaire.—Spéc. Gén., V., 1., 1859.

Pascoe.—An. Mag. N. H., 4th Ser., Vols. 3, 8-13.

Family *Cistelidæ.*

Allecula, *Fabr.*—fusiformis, elegans, *Walker.*

References.

Westwood.—Mod. Class. Ins., I., 309, 1839.

Lacordaire.—Spéc. Gén., V., 490, 1859.

III.—PSEUDO-TETRAMERA.

A.—RHYNCOPHORA.

Family *Brenthidæ.*

Prophthalmus, *Pascoe.* sanguinalis, *Pascoe.*

Family *Curculionidæ*—Weevils.

Blosyrus, *Scho.*—oniscus, asellus, *Oliv.*: Herthus, *Herbst*: inæqualis, *Guér.*: variegatus (Kash.), costatus (Kash.), *Redt.*: spongifer, *Scho.*

Cneorhinus, *Scho.*—pictus (Kash.), lituratus, obscurus (Kash.), *Redt.*

Catapionus, *Scho.*—basilicus (N. I.), *Scho.*

Atmetonychus, *Scho.*—peregrinus (Ben.): inæqualis (Ben.), *Scho.*

Piazomias, *Scho.*—acutipennis (Nil.); Perottetii (Nil.); prasinus (Nil.); himalayanus, assamensis, *Sch.*: globulicollis (Kash.); angustatus (Kash.), *Redt.*

Astycus, *Scho.*—chrysochlorus, *Wied.*: lateralis, *Fabr.*

Polyclæis, *Scho.*—parcus (Ben.), *Sch.*

Hypomeces, *Scho.*—rustieus, sparsus, curtus, *Sch.*: pollinosus (Kash.), *Redt.*

Dereodus, *Scho.*—denticollis, *Sch.*

Cratopus, *Scho.*—marmoreus, *Sch.*

Achlainomus, *Water.*—ebeninus, *Water.*

Episomus, *Scho.*—indicus, *Sch.*

Omias, *Scho.*—crinitus (Kash.), *Redt.*

Phyllobius, *Germ.*—jucundus (Kash.), *Redt.*

Macrocorynus, *Scho.*—discoideus, *Oliv.*

Drepanoderes, *Water.*—viridifasciatus (N. I.), fuscus (N. I.), *Water.*

Arhines, *Scho.*—languidus (Ben.), *Scho.*

Cyphicerus, *Scho.*—9-lineatus (Ben.): passerinus (Ben.), *Oliv.*

Platytrachelus, *Scho.*—pistacinus (Ben.), *Sch.*

Amblyrhinus, *Scho.*—poricollis, *Sch.*

Acanthotrachelus, *Scho.*—ventricosus (Nil.), *Sch.*

Phytoscaphus, *Scho.*—nepalensis, inductus, chloroticus, lixabundus, *Sch.*

Lixus, *Fabr.*—octoguttatus (Kash.); fasciatus (Kash.), *Redt.*

Peribleptus, *Scho.*—sculptus (Him.), *Sch.*

Paramecops, *Scho.*—farinosus, (Ben.), *Wied.*

Cylas, *Latr.*—fermicarius, *Fabr.*: turcipennis, lævicollis, *Sch.*

Apion, *Herbst.*—inflatum, crassicolle, triangulicolle, gagatinum, subcostatum, dilaticolle, chalybeicolor, pruinosum, indicum, amplipenna, restricticolle, flavimanum, tuberculiferum, alboirroratum, *Motsch.*

Apoderus, *Oliv.*—cygneus, *Fabr.*: longicollis, *Oliv.*: flavotuberosus, montanus (As.), crenatus, pallidulus, bistrimaculatus, bihumeratus, *Jekel:* tranquebaricus, melanopterus, Westermanii, quadripunctatus, assamensis, unicolor, gemmatus, *Sch.*

Attelabus, *Linn.*—octomaculatus (Mad.), *Jekel:* melanurus, bispinosus, discolor, *Sch.*

Euops, *Sch.*—Bowringii, *Jekel.*

Trachelolabus, *Jekel.*—Whitei, *Jekel.*

Rhynchites, *Herbst.*—alcyoneus, sculpturatus, *Pascoe.*

Dicranognathus, *Redt.*—nebulosus (Kash.), *Redt.*

References.

Westwood.—Mod. Class. I. 324, 328, 1839.

Lacordaire.—Spéc. Gén., VI., 1863.

Schonherr.—Genera et species Curculionidum. Paris, 1833-45. This appeared in eight volumes and contains 7,147 species: there is a supplement to the last volume, and a second supplement was published at Stockholm in 1847 and illustrations by Imhoff and Labram of part at Basle, 1848-52.

Pascoe.—Descriptions of new species, chiefly Australian. An Mag. N. H., 4th Ser., Vols. 7 to 20: J. Linn. Soc. X. 434; XI. 154, 440; XII.

Family *Trictenotomidæ*.

Autocrates, *Thoms.*—ænea (Him.), *Parry*.

Trictenotema, *Gray*—Childreni (Him.), *West.*: Grayii (Mad.), *Smith*.

References.

Westwood.—Cab. Or. Ent. t. 23.

Lacordaire.—Spéc. Gén., VIII., 1. 1869.

B.—LONGICORNES.

Family *Prionidæ*.

Cantharocnemis, *Serv.*—Downesii (Ben.), *Pascoe*.

Cyrtognathus, *Fald.*—indicus (Var. Hugelii, *Redt.*), (As. Him. Kash.), *Hope*: Walkeri (N. I.), *Water.*: granulosus, *Thoms*.

Dorysthenes, *Vigors.*—rostratus, *Fabr.*: montanus, *Guér*.

Dissosternus, *Hope*—Pertii (Dec.), *Hope*.

Ancyloprotus, *White*—bigibbosus (As.), *White*.

Prionomma, *White*—orientalis (Mad.), *Oliv*.

Priotyrranus, *Thoms.*—mordax (N. I.), *White*.

Logæus, *Water*—subopacus (Mad.), *Waterhouse*.

Acanthophorus, *Serv.*—serraticornis, *Oliv*.

Opheltes, *Thoms.*—obesus, *Thomson*.

Baralipton, *Thoms.*—maculosum (Cal.), *Thoms*.

Ægosoma, *Serv.*—ornaticolle, tibiale (N. I.), *White*: lacertosum (As.), *Pascoe*.

Megopis, *Serv.*—costipennis (As.), *White*.

Teledapus, *Pascoe*—dorcadiodes (Mus.), *Pascoe*.

Philus, *Saund.*—globosicollis, *Thoms*.

Cyrtonops, *White*—punctipennis, *White*.

Tragosoma, *Serv.*—subcoriaceum (N. I.), *Hope*.

References.

Westwood.—Mod. Class., Ins., I., 359.

White.—Cat. Col. Ins., British Museum, Pt. VII., 1853.

Lacordaire.—Spéc. Gén., VIII., 16, 1869.

Thomson.—Essai d'une classification de la famille des Cérambycides. Paris, 1860.

Family *Cerambycidæ.*

Dynamostes, *Pascoe*—audax, *Pascoe.*

Tetraommatus, *Perroud*—filiformis (Mad.), *Per.*

Oplatocera, *White*—callidioides (N. I.), *White.*

Neocerambyx, *Thoms.*—Paris (=Brama, *New.*) (Ben.), *Wied.*

Plocaderus, *Thoms.*—pedestris (N. I), humeralis (N. I.),? *White:* obesus, *Dup.*

Pachydissus, *New.*—demissus (N. I.), *Pascoe.*

Hesperophanes, *Muls.*—basalis (Him.), *White.*

Nyphasia, *Pascoe*—orientalis (As.), *White.*

Ceresium, *New.*—geniculatum, leucostictum, cretatum, *White.*

Phyodexia, *Pascoe*—concinna (Mus.), *Pascoe.*

Pyrocalymma, *Thoms.*—pyrochroides (N. I.), *Thoms.*

Pachylocerus, *Hope*—corallinus, *Hope:* crassicornis, *Oliv.:* pilosus, *Buq.:* plumiferus, *Pascoe.*

Pyresthes, *Pascoe*—miniatus (N. I.), *Pascoe.*

Erythrus, *White*—bicolor (N. I.), *West:* Westwoodii (Him.), *White.*

Coloborhon bus, *Thoms.*—velutinus (As.), *Saund.*

Zonopterus, *Hope.*—flavitarsis (As.), *Hope.*

Pachyteria, *Serv.*—fasciata (As.) *Fabr.:* rubripennis (As.), *Hope:* dimidiata (As.), *West.*

Aphrodisium, *Thoms.*—Cantori (As.), Griffithii (As.), *Hope:* Hardwickeanum (Nep.), *White.*

Mecaspis, *Thoms.*—aurata, chalybeata, *Thoms.*

Chloridolum, *Thoms.*—perlætum (As.), bivittatum, Nympha (N. I.), *White.*

Leontium, *Thoms.*—viride, cæruleipenne, thalassium, *Thoms.:* prasinum (Mad.), *White.*

Polyzonus, *Lap.*—cinctus (N. I.), *Guér.:* tetraspilotus (As.), *Hope:* inermis, 4-maculatus (Mad.), *White.*

Eurybatus, *Dej.*: 10—punctatus (As.), *West.*: lateritius (N. I.), *Hope:* hariolus (As.), *Dej.:* formosus, *Saund.*

Clytanthus, *Thoms.*—lituratus (Ben.), *Lap.:* albicinctus (Nep.), *Hope:* maculicollis, *Dalm.:* 14-maculatus (Níl.), mæstus (Mad.), alboscutellatus (Níl.), nepos, agnatus (Níl.), cognatus (As.), *Chevrol.*

Psilomerus, *Chevrol.*—angustus (gracilicornis, *White*), *Chevrol.*

Grammographus, *Chevrol.*—lineatus, *Chevrol.*

Ischnodora, *Chevrol.*—macra, *Chevrol.*

Rhaphuma, *Pascoe.*—glauca (Mad.), *Fabr.:* Wiedemanni, leucostellata, *Hope:* distinguenda, *Per.:* fallax, 5-notata, 6-notata, dimidiata, geniculata, russicollis, 3-maculata, *Chevrol.*

Amauresthes, *Chevrol.*—fuliginosus (Tib.), subdepressus (As.), arciferus, *Chevrol.*

Xylotrechus, *Chevrol.*—Smeei, vicinus (Dec.), ocellatus, *Lap.:* subditus, quadripes (Kash.), aper (Níl.), *Chevrol.*

Sclethrus, *New.*—amænus (Mad.), *Gory.*

Plagithyrsus, *Motsch.*—sumatrensis (Ben.), brahminus (Ben.), bicinctus (N. I.), assimilis (Nep.), *Hope:* Balyi, *Pascoe.*

Epodus, *Chevrol.*—humerosus, *Chevrol.*

Aglaophis, *Thoms.*—fasciata, *Thoms.*

Cyrtophorus, *Le Conte*—ventralis (Níl.), *Chevrol.*

Epipedocera, *Chevrol.*—Hardwickei (undulatus, *Hope*), *White:* zona (Nep.), affinis (Níl.), *Chevrol.*

Purpuricenus, *Zieg.*—montanus (Him.), *White:* sanguinolentus, *Oliv.*

Typodryas, *Thoms.*—callichromoides (As.), *Thoms.*

Noemia, *Pascoe*—Stevensii, flavicornis, *Pascoe.*

Eurycephalus, *Dej.*—maxillosus, *Oliv.*

References.

Westwood.—Mod. Class. Ins., I., 362. Cab. Or. Ent. t. 29.

White.—Cat. Col. British Museum, Pt. VII., 1853.

Schiödte.—On the classification of the Cerambyces. An. Mag. N. H., 3rd Ser., XV., 182.

Pascoe.—Longicornia Malayana. Trans. Ent. Soc., 3rd Ser., III.

Lacordaire.—Spéc. Gén., VIII., 200: IX., 1869.

Family *Lamiidæ*.

Acanodes, *Pascoe*—montanus (Darj.), *Pascoe*.

Dioxippe, *Thoms.*—costata (Nil.), *Guérin*.

Morimopsis, *Thoms.*—lacrymans, *Thoms.*

Epicedia, *Thoms.*—bigeminata, *Thoms.*

Archidice, *Thoms.*—quadrinotata, *Thoms.*

Leprodera, *Thoms.*—officinator, *Lac.*

Morimus, *White*—inœqualis (Mad.), plagiatus (Mad.), *Water:* morionoides, *White.*

Euoplia, *Hope*—polyspila (As.), Swainsoni (As.), *Hope.*

Anoplophora, *Hope*—Stanleyi (As.), *Hope.*

Merges, *Pascoe*—marmoratus (Him.), *Melly.*

Epepeotes, *Pascoe*—punctulatus (Him.), *West.:* lusca, *Fabr.*

Monochamus, *Meger.*—Downesii (N. I.), Parryi, Roylii (Mus.), sulphurifer (As.), beryllinus (As.), *Hope:* Helenor, *New.:* guttatus (Him.), *Guér.:* Westwoodii (Him.), *Melly:* bifasciatus (Him.), *West.:* larvatus, Stephanus, melanostictus (N. I.), Fredericus (As.), officinator (As.), sublineatus (As.), Brianus (Nep.), *White:* subgemmatus (As.), desperatus, griseipennis, *Pascoe.*

Myagrus, *Pascoe*—Hynesii (Bom.), *Pascoe.*

Echinoschema, *Thoms.*—armatus (As.), *White.*

Mecotagus, *Pascoe*—tigrinus, *Oliv.:* Guerinii (As.), *White:* tessellatus (As.), *Guér.*

Cyriocrates, *Thoms.*—Horsfieldii (As.), *White.*

Aristobia, *Thoms.*—reticulator, *Fabr.:* fasciculata (Kash.), *Redt.*

Celostena, *Thoms.*—javana, plagiata, tessellata, *White.*

Peribasis, *Thoms.*—larvatus (As.), *White.*

Cycas, *Pascoe*—subgemmatus (As.), *Thoms.*

Pharsatia, *Thoms.*—gibbifer (Nil.), *Guer.*

Batocera, *Lap.*—Roylii [=princeps, *Redt.*], (Kash.), *Hope:* Chevrolatii, adelpha, Chlorinda, Titana, *Thoms.*

Apriona, *Chevrol.*—Germari (As.), *Hope:* Deyrollei (As.) *Kaup.*

Orsidis, *Pascoe*—acanthocimoides, *Pascoe.*

Calloplophora, *Thoms*—Solii (As.), *Hope.*

Gnoma, *Fabr.*—casnonoides, *Thoms.*

Agelasta, *New.*—bifasciana (As.), *White.*

Coptops, *Serv.*—leucostictica (As.), *White:* centurio, *Pascoe.*

Mispila, *Thoms.*—curvilinea, *Pascoe.*

Thysia, *Thoms.*—Wallichii (Him.), *Hope.*

Calothyrza, *Thoms.*—margaritifera (Him.), *West.*

Ithocritus, *Lac.*—ruber (As.), *Hope.*

Rhodopis, *Thoms.*—pubera (As.), *Thoms.*

Olenocamptus, *Chevrol.*—dominus (As.), *Thoms.*

Mæchotypa, *Thoms.*—thoracica (As.), *White.*

Ælara, *Thoms.*—plagiata (As.), parallela (N. I.), delicatula (As.), cylindraca (As.), *White.*

Saperda, *Fabr.*—bicolor (As.), *West.*

Camptocnema, *Thoms.*—lateralis (As.), *White.*

Lychrosis, *Pascoe.*—zebrina (As.), *Pascoe.*

Anaches, *Pascoe*—dorsalis, *Pascoe.*

Xynenon, *Pascoe*—Bondii, *Pascoe.*

Prionetopsis, *Thoms.*—balteata, *Thoms.*

Smermus, *Lac.*—Mniszechii, *Lac.*

Thermistis, *Pascoe.*—croceocincta, *Saund.*

Malloderma, *Lac.*—Pascoei, *Lac.*

Glenea, *New.*—rubricollis (As.), *Hope:* sanctæ-mariæ, indiana, funerula, capriciosa, obsoletipunctata, obesa (As.), argus, annulata (Him.), chalybeata (As.), maculifera (As.), pulchella (As.), spilota, Diana (As.), Peria, Conidia (Bom.), *Thoms.*

Stibara, *Hope*—nigricornis, morbillosa, *Fabr.:* tetraspilota (As.), trilineata (As.), *Hope.*

Nupserha, *Thoms.*—cosmopolita, bicolor, *Thoms.*

Astathes, *New.*—violaceipennis (N. I.), *Thoms.:* divisa, *Pascoe.*

References.

Westwood.—Mod. Class. Ins., I., 368. Cab. Or. Ent. *t.* 5, 29.

Lacordaire.—Spéc. Gén., IX., 238. 1869-72.

Thomson —Systema Cerambycidarum. Mem. Soc. Sc. de Liège, XIX. 1864.

Pascoe.—Longicornia Malayana, Trans. Ent. Soc, 3rd Ser., III.: An. Mag. N. H., 4th Ser., IV., 203: XV., 203.

White.—An. Mag. N. H., 3rd Ser., II., 266: Progs. Zool. Soc., 1858, 398, 406.

Hope.—An. Mag. N. H., N. S., VI., 300: IX., 248: XIV., 454. Trans. Linn Soc., XVIII., 435.

C.—PHYTOPHAGÆ.

Family *Sagridæ.*

Sagra, *Fabr.*—carbunculus (As.), *Hope.*

Temnaspis, *Lac.*—speciosus (N. I.), Downesii (N. I.), quinquemaculatus (N. I.), nigriceps (Nep.), *Baly.*

Family *Crioceridæ.*

Lema, *Fabr.*—Downesii (Bom., Ben.), suturella (Ben.), Psycho (N. I.), glabricollis, *Baly.*

References.

Westwood.—Mod. Class. Ins., I., 370.

Family *Hispidæ.*

Callispa, *Baly*—insignis (N. I.), dimidiatipennis (N. I.), vittata, *Baly.*

Amblispa, *Baly*—lævigata (Mad., N. I.), *Baly.*

Botryonopa, *Blanch.*—sanguinea (N. I.), *Guér.*: Sheppardi (N. I.), *Baly.*

Estigmena, *Hope*—chinensis (Nep., N. I.), *Hope:* cribricollis (Mad.) *Water.*

Anisodera, *Chevrol.*—ferruginea (N. I.), *Guér.:* excavata (N. I.), *Baly:* cylindrica (Nep., N. I.), *Hope.*

Downesia, *Baly*—insignis (N. I.), *Baly.*

Javeta, *Baly*—pallida (Mad.), *Baly.*

Gonophora, *Chevrol.*—Saundersii (As.), *Baly.*

Hispa, *Linn.*—erinacea (Nep.), *Fabr.*

Reference.

Baly.—Catalogue of Hispidæ in the British Museum, 1858.

Family *Classididæ*—Tortoise-beetles.

Calopepla, *Boh.*—Leayana (Ben.), *Boh.*: Reicheana, *Guér.*

Epistictia, *Boh.*—selecta (Bom.); viridimaculata (Nep.), *Boh.*

Hoplionota, *Hope*—maculipennis, horrifica, ochroleuca, *Boh.*

Prioptera, *Hope*—Westermanni (As.), *Mann.*: impustulata (As.), sexmaculata (As.), maculipennis (As.), decemstillata, decemmaculata (Him.), pallidicornis, decemsignata (As.), *Boh.*

Aspidomorpha, *Hope*—miliaris (Mad.), St. Crucis (As.), dorsata, micans, *Fabr.*: amabilis, *Dej.*: orientalis, inuncta (Mad.): fusconotata: lobata (N. I.); calligera (Ben.); Egena (Ben.); indica (Almora); *Boh.*

Cassida, *Linn.*—clathrata, obscura, cruenta, *Fabr.*: livida, dispar, testacea, tricolor, *Herbst:* foveolata, 16-maculata, nigrovittata (Cal.): Moori, Syrtica, rugulosa, icterica (Almora), obtusata, conspurcata (Mad.), pallida (Mad.), pauxilla, exilis (Mad.), Delessertii, dorsonotata, nigriventris (Tib.), pudibunda, glabella (Nil.), pulvinata (Mad.), costata (Mad.), fuscosparsa (As.), *Boh.*: trilineata (Nep.), *Hope.*

Leucoptera, *Boh.*—14-notata, 26-notata (As.), 19-notata (As.), 13-punctata (As.), nepalensis (Nep.); philippinensis (Bom.), *Boh.*

Coptocycla, *Chevrol.*—sexnotata (Mad.) *Fabr.*: sexmaculata (Mad.), *Dej.*: circumdata, varians, *Herbst.*: ventralis (Nil.), bistrimaculata (Mad.), bistrinotata (Ben.), 11-notata, 17-notata, bipunctipennis (Mad)., promiscua, 7-notata, ornata (Mad.), cribrosa, *Boh.*

References.

Westwood.—Mod. Class. Ins., I., 376. 1839.

Boheman.—Monographia Cassididarum, Stockholm, 1850-55: Catalogue of the Cassididæ in the British Museum, 1856.

Family *Galerucidæ.*

Hymenesia, *Clark*—tranquebarica (Mad.), *Fabr.*

Sphenoraia, *Clark*—flavicollis (N. I.), nigripennis (N. I.), *Clark.*

Podontia, *Dalm.*—rufo-castanea, *Baly.*

Œdicerus, *Baly*—apicipennis, *Baly.*

Momæa, *Baly.*—purpurascens (Nep.), *Hope.*

Menippus *Baly*—cervinus (Nep.), *Hope.*

Xuthea, *Baly*—orientalis, *Baly.*

Antipha, *Baly*—picipes, Bretinghami, *Baly:* Bennettii (Nep.), *Hope.*

Mimastra, *Baly*—arcuata, *Sor.*

Hyphasis, *Har.*—nigricornis (N. I.), Bevani (S. I.), *Baly.*

Phygasia, *Baly*—dorsata (As.), *Baly.*

References.

Westwood.—Mod. Class. Ins., I., 381

Clark, H.—On Dejean's genus Cælomera. An. Mag. N. H., 3rd Ser., XVI., 256, 315.

Baly.—On new species of Gallerucidæ. *Ibid,* XVI., 247, 402.

Family *Eumolpidæ.*

Chrysochus, *Chevrol.*—asiaticus (N. I.), *Redt.*

Eumolpus, *Latr.*—pyrophorus, (As.), *Parry.*

Nodostoma, *Motsch.*—Dormeri, Bevani, *Baly.*

Corynodes, *Hope*—gloriosus (N. I.), *Baly:* cyaneus, (Mad.), *Hope.*

Eubrachis, *Chevrol.*—indica (Mus.), *Baly.*

Pachnephorus, *Redt.*—Bretinghami, *Baly.*

Pseudocolaspis, *Lap.*—longicollis (S. I.), *Baly.*

References.

Marshall.—Genera of Eumolpidæ. An. Mag. N. H., 3rd Ser., XIII., 380.

Baly.—J. Linn. Soc., XIV., 246.

Family *Chrysomelidæ*—Golden-beetles.

Chlamys, *Knoch*—fulvipes, *Baly*.

Colesposoma, *Lap.*—Downesii, *Baly*.

Chrysomela, *Linn.*—Krishna, Benvouloirii, Stevensii, *Baly*; Vishnu (Nep.) *Hope*.

Ambrostoma, *Motsch.*—Mahesa (Nep.), *Hope*.

Crosita, *Motsch.*—cælestina (N. I.), *Baly*.

Eumela, *Baly*—cyanicollis, *Hope*.

Family *Halticidæ*.

Xanthocycla, *Baly*—Chapuisii, *Baly*.

Argopus, *Fischer*—Haroldi, *Baly*.

Paradibolia, *Baly*—indica, *Baly*.

Chætocnema, *Steph.*—cognata, sqarrosa, Bretinghami, concinnipennis, basalis, *Baly*.

Reference.

Westwood.—Mod. Class. Ins., I., 385.

Family *Erotylidæ*.

Languria, *Latr.*—cyanea (Nep.), Hope.

IV.—PSEUDO-TRIMERA.

Family *Endomychidæ*—Fungus-beetles.

Endomychus, *Panzer.*—bicolor, *Gorham*.

Eumorphus, *Weber*—tener, *Dohrn*; pulchripes, *Gerst*.

Engonius, *Gerst.*—signifer (N. I.), *Gorham*.

Ancylopus, *Costa.*—melanocephalus, *Oliv.*; indicus (N. I.), *Gorham*.

Mycetina, *Gerst.*—castanea, *Gerst*.

Family *Coccinelidæ*—Lady-birds.

Coccinella, *Linn.*—tricincta, *Fabr.*; repanda, *Muls.*; simplex, *Walk*.

Epilachna, *Chevrol.*—28-punctata (Mad.), *Fabr.*; pubescens (N. I.), *Hope*.

Chilocorus, *Leach*—opponens (Mad.), *Walk*.

Reference.

Westwood—Mod. Class. Ins., I., 390.

ORTHOPTERA.

Orthoptera.

The order Orthoptera (straight-winged) comprises the insects commonly known as ear-wigs, cockroaches, crickets, praying-insects, leaf-insects, spectres or stick-insects, locusts and grasshoppers. The body is composed of a head, thorax and abdomen. The head is furnished with a mouth, antennæ and eyes. The mouth consists of a labrum or upper lip, two mandibles, two maxillæ, a labium or under lip and four palpi or feelers. The mandibles are armed with teeth suitable to the food on which the insect lives. In the carnivorous species these teeth resemble the canine teeth of the mammalia, and in the herbivorous species they resemble the incisive and molar teeth of mammals. The maxillæ are furnished with 5-jointed palpi and a membraneous piece vaulted above and covering the extremity of the maxillæ. This piece is called the *galea* and is either cylindrical in shape or triangular or dilated and forms one of the bases of classification. The labial palpi are 3-jointed. The antennæ are many-jointed and are inserted in front of the eyes, but sometimes below or between them. The true eyes occupy the side of the head and are compound and usually very large. There are also two to three simple eyes or ocelli, either perfect or sub-obsolete. The thorax is composed of three parts, of which the prothorax is the largest and the only one exposed. The wings are four in number, of which the elytra or anterior pair are sub-coriaceous, thin and flexible, and the posterior pair or true wings are for the most part membraneous, reticulated and longitudinally folded after the manner of a fan. In some cases the females and even both sexes are apterous, and in the ear-wigs the posterior wings are transversely folded as in the beetles. In many species the elytra of the males are rudimentary and a transparent, hard, neurated membrane covers a portion of the inner margin of the elytra and produces by friction upon each other the stridulating noise remarked in certain families of the order. A similar sound is produced in other families by rubbing the thighs of the posterior legs against the edges of the elytra. The abdomen consists of eight or nine segments furnished at the end with certain appendages. There are six legs provided with feet adapted for running or jumping. The metamorphosis is incomplete: that is, there is no such marked differences in form between the larva, pupa and

imago as obtains in the beetles. The larvæ resemble the perfect insects, only they are much smaller and are without wings. After several moultings rudimentary wings appear, and this is supposed to mark the pupa state and again after several moultings the imago with perfect wings appears.

The broad division of the order is into (1) *Cursoria*, in which the feet are adapted for running; the elytra and wings are placed horizontally to the body and the females are not provided with an ovipositor: and (2) *Saltatoria*, in which the posterior pair of legs are specially adapted for leaping. In the first division must be included the anomalous family *Forficulidæ* or ear-wigs, which many authors form into a separate order osculant between the beetles and the true *Orthoptera*. The Indian species of this family have not received much attention at the hands of naturalists. The cockroaches are exceedingly numerous in individuals and are cosmopolitan in their habits, the small *Blatta orientalis* of Europe being originally a native of India. They have not been thoroughly examined in this country probably owing to a prejudice against them on account of their offensive odour. The *Mantidæ* or praying insects are so called from the position of their fore-legs when lying in wait for their prey. They remain immovable in this attitude until a fly or other insect comes within their reach, when they quickly seize it and devour it. The *Phasmidæ* or spectres resemble dried twigs and attain some of them to a considerable size; many new species have been figured by Mr. Wood-Mason in the Calcutta Journal. Amongst the *Saltatoria*, the locusts belong to the family *Acrididæ*, and in *Scelymena Harpago* we have one that takes to the water and dives, the foliaceous appendages of the hind legs being well adapted for swimming. This is the first natatorial species of the order recorded and is found both in Bombay and in the upper provinces. The ravages of members of this family in India are too well known to need description. There are two forms of migratory locusts commonly met with. That with pink under-wings and brownish markings on the upper wings is apparently the *Œ. Edwardsii* of Westwood and occurs in swarms sufficient to break down the branches of trees on which they alight. Often for days together they pass over tracts of country in undiminished myriads, leaving whole square miles bare of all vegetation behind them. The colour of the under-

wings in this species varies from a very pale pink to a dark brown or maroon. The second and perhaps more common species in the North-Western Provinces has yellow under-wings and yellowish markings on the upper-wings. The larva of this species has the front of the head orange yellow, whilst the space behind and below the eyes is of a deep maroon and the posterior legs are of a bright yellow colour banded with black. Locusts have been found as far north as the passes leading into Tibet and are not uncommon permanent residents in the Bhábar, where there are also two or three species that occur in groups of many thousands, but are not so formidable as the two first mentioned. The female is not provided with an ovipositor and lays her eggs in some instances on the ground and in others on plants and attaches them by a gummy exudation produced at the same time. In some cases they are further protected by a frothy exudation which hardens by exposure. The eggs hatch in a few days and the larvæ are at once ready to satisfy their voracious appetite, which never appears to be satiated. To the *Gryllidæ* belongs the curious mole-cricket *Schizodactylus monstrosus* to be found in its burrow in the sands of the banks of any of our great rivers. It is easily recognized by the spiny excrescences on its legs and the net-like wings curled up at the end. It appears to be exclusively carnivorous in its habits and is not very numerous in individuals. The following list is very meagre, considering all that has been written on the Orthoptera, but I must leave to others the task of completing it:—

ORTHOPTERA.

I.—Cursoria.

Family *Forficulidæ*—Ear-wigs.

Forficula, *Linn.*—auricularia (Cal.), *Linn.*

Blattariæ.

Family *Polyphagidæ.*

Polyphaga, *Brullé*—indica, *Walker.*

Family *Panesthidæ.*

Panesthia, *Serv.*—plagiata, regalis (As.), *Walker:* monstruosa (Mad.), flavipennis (As.), Saussurü (As.), *Wood-mason:* transversa (As.), *Burm.:* æthiops (In.), *Stoll.:* forceps (Mad.), *Sauss.*

Paranauphæta, *Watt.*—limbata, *Saussure.*

Parahormetica, *Watt.*—bengalensis, *Saussure.*

Family *Planeticidæ.*

Planetica, *Sauss.*—phalangium, *Saussure.*

Family *Panchloridæ.*

Panchlora, *Burm.*—surinamensis (In.), *Sulz.*: indica (In.), *Fabr.*; tenebrigera, occipitalis (Bom.), submarginata (Bom.), *Walker.*

Family *Corydidæ.*

Corydia, *Serv.*—Petiveriana, (Mad.), *Linn.*: Gueriniana, *Serv.*; plagiata, *Walker*; ænea, *Watt.*: ornata, *Sauss.*

Family *Blattidæ.*

Phlebonotum, *Sauss.*—anomalum, *Sauss.*: pallens (Mad.), *Blanch.*

Epilampra, *Burm.*—auriculata (Bom.), *Watt.*: cribrata (As.), blattoides, melanosoma, *Sauss.*: amplipennis (As.), intacta (Bom.), characterosa, *Walker.*

Ellipsidium, *Sauss.*—laterale (As.), *Walker.*

Blatta, *Linn.*—bivittata (N. I.), *Serv.*: parvula, brevipes (Bom.), continua, lycoides, telephoroides (Bom.), subreticulata, figurata, annulifera, transversalis, fasciceps, subfasciata, inexacta, subrotundata (all Bombay), ramifera (Nep.), submarginata (As.), *Walker*: cognata, ferruginea, Himalayica, *Watt.*; Luneli, *Sauss.*

Theganopteryx, *Watt.*—jucunda, indica (Bom.) *Saussure.*

Periplaneta, *Burm.*—americana (In.), *Degeer*: thoracica, æthiopica, *Serv.*: ornata, *Watt.*: affinis, *Sauss.* ruficornis (Bom.). curta (Bom.), *Walker.*

Polyzosteria, *Burm.*—orientalis, *Burm.*: heterospila (Bom.), sexpustulata, (Bom.), *Walker.*

Family *Perisphœridæ.*

Perisphæria, *Burm.*—alta (As.), *Walker.*

Blepharodera, *Burm.*—sericea, emortualis, *Saussure.*

Loboptera, *Watt.*—indica, *Watt.*

Family *Mantidæ*—Praying insects.

Mantis, *Linn.*—simulacrum (Ben.), *Fabr.:* concinna, *Perty:* metallica (As.), *West.*

Hestias, *de Sauss.*—Brunneriana, (As.), *Sauss.:* pictipes (Cen. M.) inermis, (As.) *Wood-Mason.*

Chæradodis, *Serv.*—squilla (In.), *Saussure.*

Empusa, *Ill.*—gongylodes (N. I.), *Linn.*

Fischeria, *Sauss.*—laticeps (Bom. Mad.), *Wood-M.*

Hierodula, *Sauss.*—birivia (Mad.), *Stoll.*

Æthalochrea, *Wood-M.*—Ashmoliana (Ben.), *West.*

Campsothespis, *Sauss.*—anomala (Cal.), *Wood-M.*

Heterochæta, *Sauss.*—tricolor (Cal.), *Wood-M.*

Paradanuria, *Wood-M.*—orientalis (Mad.), *Wood-M.*

Schizocephala, *Serv.*—(Didymocorpha) ensifera (Ben.), *Wood-M.:* bicornis, *Linn.*

Family *Phasmidæ*—Stick-insects.

Phyllium, *Ill.*—crurifolium, *Serv.:* Robertsonii (Nil.), *Hope:* Scythe (As.): *West.*

Necroscia, *West.*—bimaculata (Mad.), *Stoll.:* annulata (Mad.), *Fabr.:* affinis, punctata, marginata (Mal.), *Gray:* Sipylus (As.), Pholidotus (As.), atricoxis, Casignetus (As.), Sparaxes, hilaris (As.), maculicollis (As.), *West.:* Menaka (As.), *Wood-M.*

Cyphocrania, *Serv.*—gigas, *Linn.* (var. = Empusa, *Gray*).

Creoxylus, *Serv.*—auritus, *Fabr.*

Xeroderus, *Gray.*—manicatus, *Licht.*

Lopaphus, *West.*—bootanicus (As.), Baucis (As.), *West.*

Heteropteryx, *Gray*—dilatata, *Parkinson.*

Phibalosoma, *West.*—serratipes (Mal.), *Gray:* Westwoodii (As.), annamalayanum (Mad.), *Wood-M.*

Anophelepis, *West.*—despecta (As.), *West.*

Lonchodes, *Gray.*—luteoviridis [=lacertinus, West], (As.); bicoronatus ( ); semiarmatus ( ); virgens [=sarmantosus, *West*] (As.); Porus; Stilpnus (As.); Myrina (Mad.), *West.:* brevipes (Mal.), geniculatus *Gray:* Austeni (As.); Westwoodii (Cal.); insignis (Sik.), *Wood-M.*

Bacteria, *Latr.*—Shiva (In.), *West.*

Menaka, *Wood-M.*—scabriuscula (As.), *Wood-M.*

Bacillus, *Latr.*—indicus, *Gray:* tranquebaricus (Mad.); Beroë; Regulus; cuniculus (As.); Alauna (Mad.); Artemis (As.); Amathia (Mad.), *West.:* lævigatus (As.); fuscolineatus (Panj.); Penthesilea (Bhután), furcillatus (Bhutan), *Wood-M.*

II.—Saltatoria.

Family. *Gryllidæ.*

Gryllotalpa, *Leach*—africana (Mal. N. I.), *Pal. Beauv.:* ornata, *Walker.*

Acheta, *Fabr*—monstrosa (N. I.), *Drury.*

Brachytrypes, *Erichs*—achatinus, *Stoll.:* terrificus (Mad.), signatipes (Bom.), ferreus (Mad.), bisignatus, truculentus, *Walker.*

Gryllus, *Linn*—erythrocephalus (Ben), melanocephalus (Ben.), *Serv.:* capensis, *Oliv.:* orientalis (Mad.), *Fabr.:* conscitus (Nep.), signifrons (N. I.), facialis (Bom.), humeralis (Bom.), ferricollis (Bom.), angustulus (Bom.), lineiceps (Bom.), configuratus (Bom.), parviceps (Bom.), signipes (Bom.), *Walker.*

Nemobius, *Serv.*—indicus, vagus (Bom.), *Walker.*

Madasumma, *Walker*—ventralis (N. I.), *Walker.*

Eneoptera, *Burm.*—fascipes (N. I.), concolor (Bom.), lateralis, (Bom.), alboatra (Bom.), *Walker.*

Meloimorpha, *Walker*—cincticornis (Bom.), *Walker.*

Platydactylus, *Brullé*—transversus (As.), apertus (N. I.), pallidus (As.), *Walker:* marginipennis, *Guér.*

Œcanthus, *Serv.*—rufescens (Bom.), *Serville.*

Prophalangopsis, *Walker*—obscura, *Walker.*

Phalangopsis, *Serv.*—albicornis (N. I), picticeps, *Walker.*

Ornebius, *Guèrin*—nigripalpis (Mad.), *Guer.*

Platyblemmus, *Serv.*—lusitanicus, delectus (Ben.), *Serv.*

Family *Locustidæ.*

Gryllacris, *Serv.*—plagiata (As.), contracta, aliena (As.), scita, magniceps, trinotata (Bom.), collaris (As.) gracilis (Ben.), basalis (Bom.), *Walker,* signifera (Bom. As.), *Stoll:* amplipennis, (Mal.), gladiator (Mad.), *Gerst.*

Rhapidophora, *Serv.*—picea (As.), *Serville.*

Noia, *Walker*—testacea, *Walker.*

Decticus, *Serv.*—concinnus (Nep.), pallidus (N. I.), *Walker.*

Xiphidium, *Serv.*—posticum (As.), *Walker.*

Letana, *Walker*—linearis (N. I.), *Walker.*

Ladnia, *Walker*—punctipes (N. I.), *Walker.*

Saga, *Charp.*—indica, *Herbst.*

Conocepnalus, *Thaub.*—interruptus (N. I.,) strenuus (N. I.), varius (As.), *Walker.*

Megalodon, *Brulle*—ensifer *Brulle.*

Phaneroptera, *Serv.*—punctifera (As.), roseata (N. I.), privata (As.), insignis (As.), notabilis (As.), diversa (As.), nigrosparsa (Bom.), *Walker,* rufonotata (Bom.), *Serv.*

Ancylecha, *Serv.*—lunuligera (As.), *Serville.*

Steirodon, *Serv.*—unicolor, *Stoll.*

Tedla, *Walker*—sellata (As.), simplex *Walker.*

Pseudophyllus, *Serv.*—Titan (As.), *White:* femoratus, fenestratus, neriifolia (As.), *Stoll:* uninotatus (As.), oleifolius (Mad.), *Serv.:* assimilis (As.), venosus (As.), siccus (As. Mad.), concinnus (As.), signatus, subliturratus, *Walker.*

Aprion, *Serv.*—carinatum, porrectum (As.), strictum (Bom.), curviferum (Bom.), *Walker.*

Sanaa, *Walker*—imperialis (N. I. As.), *White*: Donovani, (As.), quadrituberculatus, *Westwood*.

Cymatomera, *Schaum*—rugosa (In.), *Linn.*: viridivitta (Mal.), *Walker*.

Mecopoda, *Serv.*—elongata (As. N. I.), *Linn.*

Family *Acrididæ*.

Truxalis, *Fabr.*—nasuta (N. I.), *Linn.*: unguiculata (N. I.), *Ramb.*

Pyrgomorpha, *Fischer*—crenulata (N. I.), *Fabr.*: bispinosa (S. I.), *Walker*.

Mesops, *Serv.*—filatus (N. I.), *Walker*.

Opomala, *Serv.*—laticornis (Bom. N. I.), *Serv.*: convergens, (N. I.), tarsalis, (As.) semipicta (S. I.), *Walker*.

Xiphocera, *Latr.*—fumida (S. I.), *Walker*.

Phymateus, *Serv.*—miliaris (Nep. N. I.), *Linn.*

Pœcilocera, *Serv.*—picta (N. I.), *Fabr.*: punctiventris (Bom.), *Serv.*: ornata, *Burm.*

Teratodes, *Brullé*—monticollis (In.), *Gray*.

Cyrtacanthacris, *Serv.*—flavicornis (As.), *Fabr.*: inficita (N. I.), *Walker*.

Acridium, *Geoff.*—succinctum (N. I.), *Linn.*: flavescens (S. I.), *Fabr.*: pardalinum (S. I.), vinosum (N. I.), saturatum (S. I.), dorsale (S. I.), nitidulum (S. I.), *Walker*.

Apalacris, *Walker*—varicornis (N. I.), *Walker*.

Oxya, *Serv.*—velox (Mal.), *Fabricius*: furcifera (Bom.), *Serv.*

Heteracris, *Walker*—illustris (S. I.), elegans (N. I.), insignis (Ben.), ducalis (As.), apta (As.), varicornis (S. I.), *Walker*: alacris, *Serv.*

Caloptenus, *Burm*—insignis, glaucopsis (N. I.), liturifer (S. I.), erubescens (N. I.), scutifer (S. I.), dominans (As.), ferrugineus (N. I.), scaber (Ben.), nepalensis (Nep.), immunis (Bom.), pustulipennis (Bom.), *Walker*.

Œdipoda, *Charp.*—flava (In.), *Linn.:* Edwardsii (In.), *Hope:* venusta (S. I.), crassa (N. I.), inficita, (N. I.), rotundata (N. I.), granulosa (Biluch.) *Walker.*

Stenobothrus, *Fischer*—mundus (Bom.), decisus (Bom.), apicalis (Bom.), epacramoides (Bom.), turbatus, (Bom.), luteipes (Bom.), strigulatus (Bom.) simplex (Bom.), *Walker.*

Epacromia, *Fischer*—simulatrix (S. I.), aspera (N. I.), turpis, N. I.), *Walker.*

Ceracris, *Walker*—nigricornis (N. I.), *Walker.*

Chrotogonus, *Serv.*—trachypterus (Bom.), liaspis (Bom.), oxypterus (Bom.), pallidus (Bom.), *Blanchard.*

Phyllochoreia, *West*—fenestrata (Ben.), *Serv.:* unicolor (Mal.), *West.*

Tettix, *Fischer*—munda (N. I.), umbrifera (Bom.), lineifera, (Bom.), vittifera (Bom.), dorsifera (Bom.), obliquifera (Bom.), nigricollis (Bom.), lineosa (Bom.), quadriplagiata (N. I.), balteata (S. I.). *Walker.*

Scelymena, *Sauss.*—Harpago (Bom. In.), uncinata, *Serville.:* contracta (Mad.), *Walker.*

References.

Serville.—Histoire Naturelle des Insectes Orthoptères. Paris, 1839.

Fischer, L. H.—Orthoptera Europæa. Leipsic, 1854.

Walker.—Catalogue of the Dermaptera-Saltatoria in the British Museum. Pts. 1-5. 1868-71.

Brunner von Wattenwyl.-Nouveau système des Blattaires, 1868.

Gray, G. R.—Synopsis of the species of insects belonging to the family of Phasmidæ. London, 1835. An. King, *t.* 64.

Westwood.—Mod. Class Ins., I., 398, 407, 1839: Catalogue of orthopterous insects in the British Museum. Pt. I., Phasmidæ, 1859: Cab. Or. Ent., *t.* 7, 25, 32, 38, 39. Arc., Ent. *t.* 62, 70. An Mag. N. H., N. S., III. 495.

Bates.—Description of 52 new species of Phasmidæ. Trans. Linn. Soc., XXV., 321.

Wood-Mason, J.—On new or little known species of Phasmidæ. J. A. S. Ben., XLII., ii., 45: XLIV., ii., 215: XLV., ii, 47: XLVI., ii., 342. An. Mag. Nat. Hist, 4th Ser., XIX., 487: XX., 130: 5th Ser. I., 101. On Mantides by the same: An. Mag. N. H., 4th Ser., XVIII., 337, 438, 441: XIX., 219, 308, 380: 5th Ser., I., 143: V., 261: VI., 160. On Blattidæ by the same. J. A. S. Ben., XLV. ii., 189. Trans. Ent. Soc. 1878, 259.

HEMIPTERA.

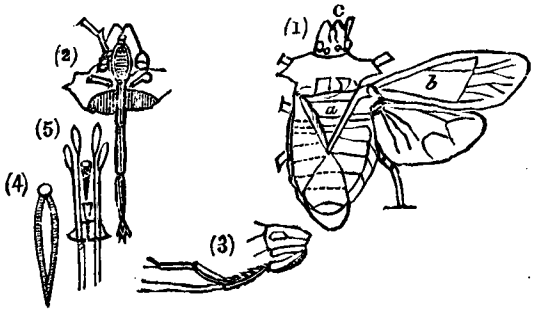
Hemiptera.

The order Hemiptera (half-winged) comprises those insects commonly called cicadas, bugs, plant-lice and the lice that prey on animals. With the exception of the males of the gall-insects and a few others the metamorphosis is incomplete and the change from the larva to the pupa state, and thence to the imago state, is not so well marked as in other orders of insects. The body is composed of a head, thorax and abdomen. The head is furnished with a mouth, eyes and antennæ. The oral apparatus is adapted for sucking and consists of three or four delicate pointed *setæ* or threads enclosed in a case which is curved downwards or disposed along the breast between the bases of the legs. The case is tubular and jointed and the threads within represent the mandibles and maxillæ of other insects. The *labrum* is present and in the shape of a *ligula* of triangular form protects the basal portion of the sucker and the *labium* is represented by the sheath, but palpi are wanting. The sucker is adapted only for extracting vegetable and animal matter in a fluid state and does not contain a sting, though the result of its application to the human body closely resembles the effect of the sting of other insects. The eyes are large and between them in many species there are 2-3 ocelli or simple eyes. The antennæ are very short and small in many families and are usually 4-5 jointed and seldom more than 11-jointed. The thorax consists of three parts, and in some genera the prothorax becomes incorporated with the mesothorax and in others it resembles that of the beetles. The scutellum in some species is very minute and in others covers the entire abdomen. The elytra of a great portion of the insects of this order are for the most part coriaceous with the tips membranous and the under-wings are membranous throughout. There are six legs and there are never more, though there are often less than three joints in the tarsus or foot. The disagreeable odour so marked insects of this order is caused by a fluid which is expressed from a sac or gland at the will of the insect and escapes through two small apertures on the underside of the metothorax, near the insertion of the third pair of legs.

In figure A (after Westwood), *Pentatoma rufipes* is shown (1) about twice the natural length with the antennæ and legs

truncated, and with the wings on one side extended; *a* represents the scutellum; *b*, the coriaceous portion of the elytra; and *c*, the base of the antennæ. In (2) we have the underside of the head and prothorax of the same insect, showing the elongated 4-jointed case or sucker (*labium*), the basal joint of which is partially covered by the elongated and triangular *labrum* (4) and at the apex are perceived the tips of the four enclosed *setæ* or hair-like processes representing the maxillæ and mandibles. In (3) we have the head of the same insect viewed laterally to show the lobes defending the base of the *labium* and the manner in which the latter is able to bend, with two of the enclosed *setæ* drawn out at the tip of the second joint and the tips of the other two seen at the end of the case. In (5) we have the dilated base of the four internal *setæ* as seen within the head on removing the *clypeus* or upper covering, and between the middle pair may be observed the pointed cartilaginous *ligula* or tongue, behind which is a small oval aperture which is the orifice of the pharynx.

FIG. A.



The Hemiptera are primarily distributed into two great sub-orders: (1) Hemiptera-Heteroptera, in which the elytra are coriaceous at the base and membranous at the apex (*hemelytra*) and the rostrum is frontal, rising from the anterior part of the head; and (2) Hemiptera-Homoptera, in which the substance of the wings is homogeneous throughout and the beak rises from the inferior part of the head and is inflected beneath the thorax between the bases of the legs.

Heteroptera.

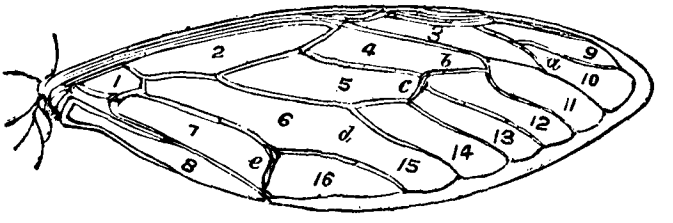
The Heteroptera are further distributed into some seventy families arranged under two classes, the *Gymnocerata* in which the antennæ are visible and

the legs are not natatorial and the *Cryptocerata* in which the antennæ are hidden and the legs are natatorial. They are all provided with organs adapted for sucking the juices of plants or animals and live either in water or breathe the free air, facts which have also led to their distribution into *Hydrocorisæ* or water-bugs and *Geocorisæ* or land-bugs. The first three families on the list live on plants from which they extract the juices by means of the sucker with which they are furnished. Many of them are of brilliant colours, especially the genus *Calleida*, and all have the scutellum abnormally developed. They are well represented in India, where some are of a delicate green, others of a navy blue, others red, brown and yellow beautifully varnished. A large red bug, of which the female measures nearly two inches in length, is common on the *lahsora* (*Cordia Myxa*) in the forests of the submontane tract. *Coptosoma cribrarium*, procured at Allahabad, is of a deep brown, tubercled or mottled and at first sight has the appearance of a beetle, but its odour soon betrays its real affinity. In the family *Pentatomidæ* the scutellum does not cover the whole of the body. The insects of this family are commonly known as wood-bugs, of which the Indian species are often enriched with brilliant colours. Their larvæ differ from the perfect insect only in the absence of wings and the pupæ in having only rudimentary wings. In all states they live on vegetable juices. The species of the genus *Strachia* belonging to this family are found on various members of the cabbage tribe and with others are common pests in our gardens. They can never be mistaken for other insects since almost all of them exhale the disagreeable odour common to them with the bed-bug (*Cimex lectularius*). In the *Edessidæ* the body is very flat with the margins notched, dilated and angular, and in the *Coreidæ* there is no apparent neck and the head is trigonal and sunk in the prothorax. The bugs of the latter family are said to feed on other insects as well as on the juices of plants. Amongst the *Lygæidæ* mention may be made of *L. grandis* from Upper India. It is red with two spots on the elytra and with the antennæ, tibia and tarsi black. The *Reduvidæ* consist of certain minute species that prey on other insects and even on the bed-bug. The *Belostomatidæ* and *Nepidæ* are water-bugs, but this division requires much more careful examination than it has hitherto had in India.

Homoptera.

In the Hemiptera-Homoptera there are three sub-divisions, *Cicadina*, *Phytophthires* and *Anoplura*. To the first belong the families *Stridulantia*, *Cercopidæ*, *Jassidæ* and *Fulgoridæ* : to the second the plant-lice ; and to the third the lice that prey on animals. The terminology of the neuration in the Homoptera may be gathered from the following figure representing the fore-wing of a *Cyclochila*, belonging to the family *Stridulantia* :—

FIG. B.



Explanation.—1, primitive ; 2, front ; 3 to 8, first to sixth discoidal cells : 9 to 16, first to eighth marginal areolets : *a*, *b*, *c*, *d*, *e*, first to fifth transverse veins.

The cicadas, lantern-flies and wax-insects belonging to the first divisions are amongst the most curious examples of insect life. The stridulation of the cicadæ is a familiar sound to all in India and is at times so loud as to be almost deafening. It is produced in the males only and the apparatus is thus described by Wilson :— " When we examine the lateral base of the abdomen of a male cicada, we perceive two large scaly plates of a rounded figure, approaching that of a demi-oval, cut through its smaller axis ; so that each plate presents a side which is rectilinear, while the remaining portion exhibits a rounded outline. It is by the straight side that each plate is fixed without articulation on the metathorax of which it forms a portion. When we lift up these plates we discover a cavity on each side of the abdomen divided into two principal chambers by a horny triangular septum. When viewed from the side of the abdomen, each cell presents anteriorly a white and plaited membrane, thin, light and as transparent as glass, called *le miroir* by Reaumur. If we open the mirror from above we perceive on each side of it another plaited membrane moved by a powerful muscle composed

of a great number of straight parallel fibres and arising from the horny septum. This latter membrane is the tympanum or drum on which the muscles act by contraction and relaxation, alternately tightening and restoring it to its original state. This is the true origin of the sound which in fact may be produced even after the death of the insect by jerking the muscle." The cicadæ live on shrubs and trees, of which they suck the juices. The female lays her eggs in holes which they form in the branches and which may be recognised by little irregularities formed by a portion of the wood which has been raised. The larvæ are white and have six legs and soon escape to the ground and burrow in it to live on the roots of plants. They then undergo the change to the pupa state, and after about a year appear as perfect insects. In the *Fulgoridæ* the antennæ are inserted immediately beneath the eyes and the head is dilated in front into a protuberance which is said, in the living insect, to emit a strong light. The *Cercopidæ* are remarkable for the frothy matter with which some species surround their larvæ, called cuckoo-spittle in England. At one time it was thought that in *Flata limbata*, found in Kumaon, we possessed an equivalent to the wax-yielding insect of China of which Sir G. Staunton and the Abbé Grossier have given an account, but Captain Hutton's researches show[1] that the deposit of the former is of a different character and does not possess the properties of the white-wax of China. Amongst the *Phytophthires*, the *Psyllidæ* are distinguished by their third pair of legs being formed for leaping. They are nourished by the juices of trees and various plants on which they live. The *Aphidina* include the plant-lice, which are furnished with two horn-like projections at the posterior extremity that exude a sugary, transparent liquor much affected by ants. These minute insects dwell together in societies and walk slowly and cannot leap, so that they fall an easy prey to the larvæ of the Neuropterous genus *Hemerobius*, to those of several species of Diptera, and especially to the grubs of the lady-birds.

In the third amily or *Coccidæ* there is at least one or two local species that deserve some further notice. Geoffroy attributed to a species of kermes the faculty of producing a sugary substance of a white colour resembling manna, and Captain Frederick gave an

[1] J. A. S. Ben., XII., 898.

account[1] of a manna-like substance called *gez* found in Persia, but was doubtful whether it was of vegetable or insect origin. Subsequently General Hardwicke described[2] an insect under the name *Chermis mannifer*, obtained on a *Celastrus* at Pachmarhi in the Central Provinces, and which yielded a similar manna of a waxy nature. He described the insect as of about the size of the common bed-bug, of a flattened ovate form and with a rounded tail. The snout is longer than the thorax, inflected and pressed down between the legs: the antennæ are 3-jointed and as long as the thorax; first joint minute, second clavate and much the largest, and third setaceous: legs long, formed for walking, tarsi 3-jointed, wings rudimentary: colour light brown. The substance produced by these insects appeared to project from the abdomen in the form of a tail or bunch of feathers like snow which gradually lengthened and fell on the leaves, where it caked and hardened like wax. The same insect has been recorded from Kumaon, where it is found on the *Elæodendron Roxburghii*, the *debari* of the outer range and Siwálik tract. Mr. Thompson writes:—"It will be known by its clustering around the stem in large numbers conspicuous for the white downy appearance which the long filimentary processes issuing from its body give it. Some of these pretty creatures will remind one of a porcupine with all its quills bristling. They excrete a white substance of a sweet taste and which cakes on the leaves of the plant they affect." A similar phenomenon is observed in the lac-insect (*Coccus lacca*, Kerr), which yields the resin and lac-dye of commerce. We have its life-history in a series of observations made by Mr. Carter in Bombay in 1860 on certain specimens procured by him on the custard-apple tree (*Anona squamosa*). This insect is also found in the forests along the foot of the Kumaon hills and in the Dúns, chiefly on the *dhák* (*Butea frondosa*), *pípal* (*Ficus religiosa*) and other fig-trees. The first thing that struck Mr. Carter on looking at the surface of the resiny incrustration within which the insects were alive was the presence of a white kind of powder like that observed around the cochineal insects. This is concentrated here and there in little spots, and on being more closely examined will be seen to be chiefly confined to three bunches of curly, hair-like filaments which radiate from three

[1] Trans. Bom. Lit. Soc., 1. Soc., 1., 103, (zool.): III., 178.

[2] As. Res. XIV., 184: see also J. Linn.

small holes in each spot in the incrustation and are continuous with corresponding apertures in the insects from which the white filaments originally proceed. These filaments are shown to be the attenuated extremities of the tracheæ or breathing arrangements of the insect, covered with a white powder which after impregnation increases so as to cover the whole of the branch occupied by the insects. This description shows that the so-called manna is produced by a *Coccus* closely allied to the lac-insect whose history we shall now record.

The young are ovi-viviparous and issue from the body of their parent about the beginning of July as an elliptical grub of a red colour, one-fortieth of an inch long and possessed of six legs, two antennæ and two ocelli.[1] The mouth is placed on the ventral surface at some distance from the anterior extremity and is in time furnished with *setæ* or hairs and a proboscis by which it attaches itself to the bark of the tree on which it lives. It at once commences to grow in size and to secrete the resinous substance with which its entire body, except the anal orifice, is ultimately enveloped. By the middle of August, the distinction of the sexes is completed and the male becomes more highly developed and leaves an opening for exit, whilst the female remains enclosed in the resin. The males of the summer brood are possessed of antennæ, of which the *scapus* is 2-jointed and the *flagellum* has seven joints; they have also four eyes and a caudal apparatus for impregnation: in the winter brood they are also furnished with wings. Impregnation takes place in the first week of September and the young brood appear swarming out of the anal orifice of the female at the end of the first week in December, when, again the same changes occur, resulting in a second brood in the first week of the following July. The red colouring matter appears first in the ovary of the female after impregnation in the shape of a large number of spherical globules and then in the young *Coccus* itself, and therefore the time when both colouring matter and resin will be at its maximum will be for the summer brood during June and for the winter brood during November. Propagation can be effected by transferring a stick encrusted with the resin just before the time of evolution and tying it to the tree on which it is desired to rear the brood.

[1] An. Mag., N. H., 3rd Ser., VII., 1, 363 (plates).

In the following list I have added the locality 'Bur.' (Burma) to those species recently recorded from that country by Mr. Distant[1] to show the wide geographical distribution of some species :—

I.—HEMIPTERA—HETEROPTERA.

Family *Plataspidæ.*

Brachyplatys, *Boisd.*—silphoides (As.), Vahlii (As.), *Fabr.:* subænea (N. I.), *Hope:* radians (As.), *Voll.:* Burmeisteri (As.), *Dist.:* bistriga (Mad.), *Walker.*

Coptosoma, *Lap.*—cribrarium (N. I.), *Fabr.:* 12-punctatum, circumscriptum (N. I.), sphærulum (N. I.), *Germ.:* nepalensis, parvulum, cicatricosum (N. I.), *Dallas:* xanthochlorum, integrum, *Walker.*

Plataspis, *West.*—nitens (N. I.), *Dallas:* nitida, hemisphærica, *Hope.*

Family *Cydnidæ.*

Æthus, *Dall.*—foveolus (N. I.), maurus (In.), pygmæus, apicalis (N. I), *Dallas:* indicus (N. I.), *Hope:* transversus, *Burm.:* brevipennis, *Fabr.:* Badius, *Walker.*

Stibaropus, *Dall.*—brunneus (N. I.), *Dallas:* testaceus, *Walker.*

Family *Pachycordiæ.*

Cantao, *Serv.*—ocellatus (As.), *Thun.*

Scutellera, *Lam.*—nobilis (In.), *Fabr.:* fasciata (Nep., As.), *Panzer.*

Sophela, *Walker.*—spinigera, (As.), *Dallas.*

Brachyaulax, *Dist.*—oblonga (N. I., As.), *Hope.*

Pæcilocoris, *Dall.*—interruptus (Nep.), purpurascens (Nep.), Hardwickii (Nep., As.), *Hope:* Druræi (N. I., As.) *Linn.:* Childrenii (Nep.), *White:* obesus (N. I., As.), rufigenis (As.), obsoletus (N. I.), ornatus) (N. I.), pulcher (Mad.), *Dall:* anisospilus (As.), *Walker.*

[1] J. A. S. Ben., XLVII., ii., 37.

Chrysocoris, *Hubn.*—patricius (As.), *Fabr.*: grandis (As., Bur.), *Thunb.*: purpureus (As.), *Hope.*

Lamprocoris, *Stál.*—Roylei (Nep., As.), *Hope:* spiniger (As.), *Dall.*

Callidea, *Dall.*—Baro (As.), purpurea (Ben., Bom.), *Fabr.*: Stolii (As., N. I.), *Wolff*: marginella (Bom.), bengalensis, Roylei, *Hope:* pulchella (As.), *Dall.*: Stockerus, *Linn.*: fascialis (As.), *White:* lateralis (As.), dilaticollis, *Guérin.* histeroides (As.), scripta (As.), gibbula (Panj.), contraria porphyricola, *Walker.*

Hotea, *Serv.*—curculionoides (As., Burm.), *H.-S.* nigrorufa, diffusa, *Walker.*

Elvisura, *Spinola*—spinolæ, *Signoret.*

Sphærocoris, *Burm.*—lateritius, *Hope*: rusticus (Mad.), *Stoll.*

Coeloglossa, *Germ.*—rubro-punctata, *Guér.*

Alphocoris, *Germ.*—lixioides (N. I.), *Germ.*

Family *Asopidæ.*

Cazira, *Serv.*—verrucosa (In.), ulcerata, (Mad.), *West.*

Cecyrina, *Walk.*—platyrhinoides (As.), *Walk.*

Canthecona, *Serv.*—furcillata (Bom., N. I.), *Wolff*: grisea (N. I.), *Dall.*: tibialis (As.), binotata (As.), nigrivitta (As.), *Dist.*

Picromerus, *Serv.*—spinidens (As.), *Fabr.*: obtusus (As.), nigrivitta, (As.), *Walk.*: robustus (As.), *Distant.*

Family *Podopidæ.*

Podops, *Lap.*—niger, *Dall:* spinifer, *Hope:* limosus, *Walker.*

Scotinophora, *Voll.*—lurida (As.), *Burm.*: obscura (As.), *Dall.*: tarsalis (As.), *Voll.*

Aspidestrophus, *Stál.*—morii (As.), *Stál.*

Family *Sciocoridæ.*

Sciocoris, *Fall.*—indicus (N. I.), *Dall*: gastricus, *Thumb.*: ruficornis, *Fabr.*: lateralis, *Fieb.*

Laprius, *Dist.*—varicornis (N. I., As.), *Dall.*

Mecidea, *Dall.*—indica (Ben.), *Dall.*

Ædrus, *Dall.*—ventralis (As.), *Dall.*

Family *Halydidæ.*

Agonoscelis, *Spin.*—nubila (As., N. I.), *Fabr.:* femoralis (N. I.), *Walker.*

Œstopis, *Dist.*—terra (As.), *Dist.*

Erthesina, *Spin.*—acuminata (N. I.), *Dall.:* Fullo (As.), *Thunb.*

Dalpada, *Serv.*—oculata (As., Burm.), clavata (N. I., As.), *Fabr.:* nigricollis, varia (As., Burm.), affinis (N. I.), *Dall.:* versicolor (N. I., As.), *Sch.:* confusa (Marri), *Dist:* bulbifera, tecta (As.), brevivitta (As.), *Walker.*

Agæus, *Dall.*—tessellatus, *Dall.*

Halys, *Fabr.*—dentata (Bom., N. I.), *Fabr.*

Family *Pentatomidæ.*

Bolaca, *Walker.*—unicolor (N. I.), *Walker.*

Belopis, *Dist.*—unicolor (As.), *Dist.*

Mormidea, *Serv.*—socia (N. I.), nigriceps, *Walker.*

Ælia, *Fabr.*—glandulosa (N. I.), *Burm.*

Cratonotus, *Dist.*—coloratus (As.), *Dist.*

Hoplistodera, *Hope*—virescens (N. I.), *Hope.*

Æschrus, *Dallas.*—obscurus (N. I.), *Dall.*

Axiagastus, *Dall.*—Rosmarus (As.), *Dall.*

Stollia, *Dist.*—guttigera (As.), *Thunb.*

Apines, *Dall.*—concinna (N. I.), *Dall.*

Pentatoma, *Oliv.*—cruciata (N. I.), *Fabr.:* pallida (N. I.), maculicollis (N. I.), elongata (N. I., As.), parvula, pulchera, crossota (N. I.), cruciata (N. I.), *Dall:* inconcisa, vicaria, *Walker.*

Palomena, *Dist.*—Reuteri (Marri), spinosa (N. I.), *Distant.*

Tolumnia, *Ellen.*—latipes (As.), *Dall.*

Halyomorpha, *Dist.*—picus (As.), *Fabr.:* scutellata (As., Bom.); *Dist.*

Cappæa, *Ellen.*—taprobanensis (As.), *Walk.*

Strachia, *Hahn*—ornata (N. I.), *Linn.*: picta (N. I.), *Fabr.*: speciosa (N. I.), *Dall.*: crucigera (As., Burm.), *Hahn*: decorata, *Schaum*: limbata (As.), *Stál*: liturifera (N. I.) designata, velata (N. I.), pardalis, inornata, afflicta, *Walker*.

Bathycœlia, *Serv.*—indica (N. I.), *Dall.*

Catacanthus, *Spin.*—incarnatus (In., Burm.), *Drury*.

Plautia, *Stál.*—fimbriata (As.), *Fabr.*

Antestia, *Stál.*—anchora (As., Burm.), *Thunb.*: apicalis (N. I.), *Dallas*.

Nezara, *Serv.*—viridula (As.), *Linn*: subsericeus (N. I.), *Hope*: humeralis (As.), *Walk.*

Prionochilus, *Dist.*—8-punctatus (As.), *Dall.*

Rhaphigaster, *Serv.*—macracanthus (N. I.), humeralis (As.) *Dall.*: flavolineatus (N. I.), *Mayr.*: strachioides, rubriplaga, bisignatus, patulus (N. I.), *Walker*.

Cuspicona, *Dall.*—plagiata (N. I.), *Walker*.

Menida, *Dist.*—flavovaria (As.), *Dall*: distincta (N. I.), *Dist.*

Prionaca, *Dall.*—lata (As., Burm.), *Dall.*: exempta (As.), *Walk.*

Microdeuterus, *Dall.*—megacephalus (N. I.), *Sch.*

Diplostira, *Dall.*—valida (As.), *Dall.*

Rhynchocoris, *West.*—humeralis (As.), *Thunb.*: serratus (Mad.), *Don*.

Sastragala, *Serv.*—uniguttata (As.), *Don*.

Acanthosoma, *Serv.*—punctatum (N. I.), distinctum (N. I.), forfex (N. I.), elongatum (N. I.), recurvum (N. I.), cornutum (N. I.), *Dall*: heterospila (Panj.), binotata, aspera (N. I.), truncatula, immunda, alaticornis, nigricornis, *Walker*.

Asyla, *Walker*—indicatrix, *Walker*.

Family *Urostylidæ*.

Urochela, *Dall.*—bimaculata (N. I.), obscura, quadripunctata, *Dall*: discrepans, *Walker*.

Urostylis, *West.*—punctigera (As.), histrionica, *Hope:* gracilis (N. I., As.), notulata, pallida (N. I.), *Dall.:* fumigata (As.), lopoides, *Walker.*

Urolabida, *West.*—tenera (As.), *Hope:* Grayii (As., Nep.), *White:* binotata (As.), *Walker.*

Family *Edessidæ.*

Tessaratoma, *Serv.*—papillosa, *Drury:* malaya (As.), *Stál:* chinensis, *Thunb.:* javanica (N. I.), scutellaris (As.), *Stoll.*

Eusthenes, *Lap.*—cupreus (In.), *Hope:* robustus (As.), *Serv.:* Polyphemus (N. I.), *Stál.*

Eurostus, *Dall.*—grossipes (As.), *Dall.*

Mattiphus, *Serv.*—oblongus (N. I.), *Dall:* nigridorsis, *Stál.*

Pycanum, *Serv.*—rubens (As.), amethystinum, *Fabr.:* jaspideum, *Schaum:* amplicolle ponderosum (As.), *Stál.:* stabile, pallipes (N. I.), *Walker.*

Dalcantha, *Serv.*—dilatata (As.), *Serv.:* inermipes (Panj.), *Stál:* regia, *Walker.*

Cyclopelta, *Serv.*—obscura (As., Burm.), *Serv.:* tartana (As.), *Stál.:* siccifolia (N. I.), *Dall.*

Aspongopus, *Lap.*—Janus (In.), obscurus (In.), *Fabr.:* ochreus (As.), nigriventris, nepalensis (As., Nep.), sanguinolentus, *Hope:* marginalis (As.), *Dall.:* circumcinctus, *Walkr.*

Muscanda, *Walker*—testacea (As.), *Walker.*

Family *Phyllocephalidæ.*

Placosternum, *Serv.*—Taurus (As.), *Fabr.*

Dalsira, *Serv.*—glandulosa (As.), *Wolff.*

Tetroda, *Serv.*—histeroides (As.), *Fabr.:* transversalis (N. I.), *West.:* divaricata (Nep.), atomaria (N. I.), nigripennis (N. I.), obtusa (N. I.), *Dall.:* bilineata, *Walker.*

Cressona, *Dall.*—Valida, *Dall.*

Atelides, *Dall.*—centrolineatus (As.), *Dall.*

Macrina, *Serv.*—coccinea (As.), *Walk.:* dilatata (As.), *Dist.*

Megarhynchus, *Lap.*—limatus (As.), *Sch.*: hastatus, *Fabr.*: testaceus, *Serv.*: truncatus, *Hope*: diversus, *Walker.*

Family *Megymenidæ.*

Megymenum, *Guér.*—inerme (As., N. I.), *Sch.*

Family *Mictidæ.*

Brachytes, *West.*—bicolor (Bom., N. I.), *West.*

Dalader, *Serv.*—acuticosta (As., N. I., Bur.), *Serv.*: planiventris (As.), *Hope.*

Trematocoris, *Mayr.*—grossa (As.), calcar, *Dall*: dentipes, *Serv.*: notatipes, patulicollis subvittala, *Walker.*

Derepteryx, *White*—Hardwickii (Nep., As.), Grayii (Nep., As.), *White.*

Helcomeria, *Sign.*—spinosa (As.), *Sign.*

Prionolomia, *Sign.*—fulvicornis (As.), *Fabr.*: biplagiata (As.), *Walk.*: gigas (As.), *Dist.*

Anoplocnemis, *Sign.*—phasiana (As.), *Fabr.*: compressa (N. I., As.), *Dall.*

Mictis, *Leach.*—nigricornis (As.), gallina (As., Bur.), *Dall*: fasciata, albiditarsis (Nep.), *Hope*: dentipes. *Serv.*: umbilicata (As.), *Sch.*: nigrorufa (As.), ferrifera, amplectens, *Walk.*: tenebrosa (As., Bur.), heros (As.), pictor (As.), *Fabr.*: protracta, *Schaum.*

Notobitus, *Stál.*—Meleagris (As.), *Fabr.*: marginalis (As.), *Hope*: serripes (As.), *Dall.*: excellens (As.), *Dist.*

Cloresmus, *Stál.*—nepalensis (Nep., As.), *Hope*: brevicornis (As.), *Sch.*

Physomerus, *Burm.*—calcar (As., Bur.), grossipes, *Fabr.*: parvulus (N. I.), *Dall.*

Family *Homæoceridæ.*

Homæocerus, *Burm.*—angulatus (Mad.), 2-guttatus (N. I., As.), *Dall.*, *Hope*: albiventris, macula, *Dall.*: fascifer (As.), *Stál*: unipunctatus (As.), *Thunb.*: graminis abbreviatus, *Fabr.*: anticus, minax, *Walker*: prominulus (A. I.), *Dall.*

Ornytus, *Dall.*—brevicornis (N. I.), *Dall.*

Family *Anisoscelidæ*.

Serinetha, *Spin.*—augur (Bom., Ben., Bur.), abdominalis (Bom., Ben., Bur.), *Fabr.*: corniculata, *Stál.*

Lybas, *Dall.*—obscurus (As.), *Dall.*

Leptoglossus, *Sign.*—membranaceus (As.), *Fabr.*

Family *Alydidæ*.

Euthetus, *Dall.*—pulchellus (N. I.), *Dall.*

Camtopus, *Serv.*—linearis (Bom.), pedestris (As., Bur.), *Fabr.*: ventralis (Bom.), *Hope.*

Family *Stenocephalidæ*.

Leptocorisa, *Latr.*—varicornis (In.), angustatus, *Fabr.*

Family *Coreidæ*.

Metacanthus, *Costa*—pulchellus (N. I.), *Dall.*

Cletus, *Stál.*—calumniator (As.), hastatus (Mad.), *Fabr.*: punctulatus (As., N. I.), bipunctatus (N. I.), *Hope*: signatus (N. I.), pallescens inconspicuus conspicuus, *Walker.*

Ceratopachys, *West.*— vicinus (N. I.), variabilis (N. I.), *Dall.*

Cletomorpha, *Stál.*—denticulata (As.), *Stál.*

Clavigralla, *Spin.*—gibbosa (Bom.), *Spin.*

Acanthocoris, *Serv.*—scabrator (As., Bur.), *Fabr.*

Petalocnemis, *Stál.*—obscurus (As.), *Dall.*

Family *Rhopalidæ*.

Rhopalus, *Schill.*—bengalensis, *Dall.*

Family *Lygæidæ*.

Bochrus, *Stál.*—foveatus (As.), *Dist.*

Lygæus, *Fabr.*—nigriceps (As.), maculatus (N. I.), bipunctatus, guttiger (N. I.), *Dall.*: militaris (N. I.), familiaris (As., Bom.), mendicus, *Fabr.*: pacificus, *Boisd.*: grandis, *Gray*: argentatus (As.), *Stál*: inæqualis (As.), semiruber, *Walker.*

Graptostethus, *Sign.*—servus (As.), *Fabr.*: 3-signatus (As.), 4-signatus (As.), *Dist.*

Arocatus, *Spin.*—pusillus, *Dall.*: pilosulus (Marri), *Dist.*

Beosus, *Serv.*—uniguttatus (As.), *Thunb.*

Lethæus, *Dall.*—sindicus (N. I.), *Dall.*

Aphanus, *Lap.*—indicus (N. I.), *Dall.*

Pachymerus, *Serv.*—sordidus (As., N. I.) *Fabr.*: anticus (As.), *Walker.*

Rhyparochromus, *Curtis*—pallens (N. I.), bengalensis, assimilis (Bom), pallicornis, gutta (N. I.), *Dall.*: leucospilus (As.), semilucens (N. I.), anticus, *Walker.*

Ischnodemus, *Fieb.*—punctatus (N. I.), *Walker.*

Family *Pyrrhocoridæ.*

Lohita, *Serv.*—grandis (As., Bur.), *Gray:* longissima (As.), *Stál.*

Physopelta, *Serv.*—gutta (As., Bur.), *Burm.*: Schlanbuschii (As.), *Fabr.*: cincticollis, *Stál*: apicalis, plana, bimaculata, *Walker*,

Iphita, *Stál.*—limbata (As., Bur.), *Stál.*

Antilochus, *Stál.*—russus (As., Bur.), *Stál.*: Coquebertii (As., Bur.), *Fabr.*

Odontopus, *Latr.*—sanguinolens, *Serv.*: nigricornis (As., Bur.), russus, *Stál*: varicornis (As.). *Fabr*: scutellaris (N. I.), *Walker.*

Ectatops, *Serv.*—limbatus (As.), *Serv*: lateralis (As.), distinctus (As.), *de Vuill.*

Melamphaus, *Serv.*—faber (As.), *Fabr.*: rubrocinctus (As.), *Stál*: femoratus (N. I.), *Walker.*

Dindymus, *Serv.*—rubiginosus (As. Bur.), sanguinens, *Fabr.*: ovalis, lanius (As.), *Stál.*

Pyrrhocoris, *Fall.*—vittiventris (As.), *Walk.*: grandis, *Gray.*

Dysdercus, *Serv.*—cingulatus (As., Bur.), *Fabr.*

Family *Phymatidæ.*

Amblythyreus, *West.*—angustus (As.), quadratus, *West.*

Tingis, *Fieb.*—erosa, *Walker.*

Family *Brachyrhynchidæ.*

Brachyrhynchus, *Lap.*—membranaceus (As.), *Fabr:* orientalis (In.), *de Lap.*

Crimia, *Serv.*—rubescens, *Walker.*

Family *Holoptilidæ.*

Maotys, *Serv.*—viverra, *Westwood.*

Family *Capsidæ.*

Phytocoris, *Fall.*—Stoliczkanus (Marri), *Dist.*

Calocoris, *Stàl.*—Stoliczkanus (Marri), *Dist.*

Capsus, *Fabr.*—partitus (N. I), stramineus (N. I.), patulus (N. I.), *Walker.*

Family *Reduvidæ.*

Isyndus, *Stál.*—heros (As.), *Fabr.*

Endochus, *Stál.*—famulus (As.), *Stál.*

Euagoras, *Burm.*—plagiatus (As., Bur), *Burm.*

Sycanus, *Serv.*—collaris (As.), *Fabr.*

Velinus, *Stál.*—annulatus (As.), *Dist.*

Cosmolestes, *Dist.*—annulipes (As.), *Dist.*

Reduvius, *Fabr.*—marginellus (As.), *Fabr.:* nigricollis (As.), *Dall.:* mendicus (As., Bur.), costalis (As.), pulchriventris (As.), *Stál:* Reuteri (Sd.), *Dist:* rivulosus (As.), perpusillus (N. I.), singularis, *Walker.*

Petalochirus, *Burm.*—malayus, *Stál.:* singularis, *Walker.*

Lophocephala, *Lap.*—Guerini (Bom.), *Lap.*

Opistoplatys, *West.*—indicus, *Walker.*

Family *Ectrichodidæ.*

Vilius, *Serv.*—melanopterus (As.), *Stál.*

Ectrichodia, *Lep.*—tuberculatus (As.), maculiventris, *Stál.:* discrepans (In.), insignis, limbifera, *Walker:* crudelis (N. I.), nigripennis, *Fabr.*

Ectrichotes, *Sch.*—pilicornis (As., Mad.), *Fabr.*

Family *Piratidæ*.

Pirates, *Burm.*—atro-maculatus (As.), cyaneus, quadriguttatus, ochropterus, cordiger, granulatus, *Stál*: punctus, quadrinotatus, *Fabr*: cordatus, lepturoides (N. I.), *Wolff*: adjunctus, (N. I.), posticus (N. I), sexmaculatus, strigifer, basiger (N. I.), decisus (N. I.) instabilis (N. I.), latifer, mutilloides (As.), naboides, bipunctatus, *Walker*: pictus, *Schaum*.

Lestomerus, *Serv.*—affinis (As.), *Serv.*: flavipes (N. I.), diffinis, *Walker*: sanctus, *Stoll*.

Catamiarus, *Serv.*—brevipannis (In.), *Serv.*

Androclus, *Stál.*—granulatus (As.), *Serv.*

Family *Acanthaspidæ*.

Sminthus, *Stál.*—fuscipennis (As.), marginellus, *Dist.*

Acanthaspis, *Serv.*—5-spinosa (As.), 6-guttata *Fabr.*: helluo (As.), cincticrus (As.), pedestris (Mad.), concinnula (Dec.), biguttula, bistillata, (As.), rugulosa (N. I.), ornata, *Stál*: fulvipes (As.), *Dall.*: tergemina, *Stoll.*: unifasciata, *Wolff.*: quadrinotata, luteipes (N. I.), megaspilus, dubius, micrographa (N. I.), *Walker*.

Pachynomus, *Klug.*—biguttatus, *Stál*.

Prostemma, *deLap.*—carduelis, *Dohrn*: placens, *Walker*.

Family *Stenopodidæ*.

Oncocephalus, *Klug.*—annulipes (As.), *Stál.*: naboides (Mad.), *Walker*.

Stenopoda, *deLap.*—hastata (N. I.), *Walker*.

Pygolampis, *Germar.*—unicolor (N. I.), concolor, *Walker*.

Family *Apiomeridæ*.

Sycanus, *Serv.*—collaris (In.), *Stoll*: versicolor (Ben.), croceovittatus, *Dohrn*: indagator, depressus, *Stál.*: pyrrhomelas, semimarginatus (As.), *Walker*.

Harpactor, *de Lap.*—pulchriventris (N. I.), costalis, (Ben.), *Stàl:* obscurus (As.), nigricollis (As.), *Dall.:* fuscipes, *Stoll.*

Euagoras, *Burm.*—famulus, atrispinus, dichrous (As.), conspersus *Stál.*

Family *Emesidæ.*

Emesa, *Fabr.*—filum, *Fabr.*

Family *Gerridæ.*

Gerris, *Latr.*—fossarum, *Fabr.*

Ptilomera, *Serv.*—laticauda (As., Bur.), *Hard.*

Family *Belostomatidæ.*

Belostoma, *Latr.*—indica (As., Bur.), *Serv.*

Sphærodema, *Lap.*—annulatum, *Fabr.*

Family *Nepidæ.*

Ranatra, *Fabr.*—elongata, filiformis, *Fabr.:* macrophthalma, *Walker.*

Lacotrephes, *Stál.*—ruber (As.), *Linn.:* japonensis (As.), *Scott.:* robustus (As.), *Stál.*

References.

Westwood.—Mod. Class. Ins., II., 450, 1839. An. Mag. N. H. N. S. II., 26.

Amyot et *Serville.*—Histoire Naturelle des Insectes Hémiptères. Paris, 1843.

Dallas.—List of specimens of Hemipterous insects in the British Museum. Pt. I., 1851: Pt. II., 1852.

Distant.—New Hemiptera from the N.-E. frontier. An. Mag. N. H., 5th Ser., III., 44, 127: J. A. S., Ben., XLVII., ii., 194, Trans. Ent. Soc., 1878, 174, 321.

Dohrn.—Catalogue of the Hemiptera, 1859.

Stál.—Hemiptera Africana. Stockholm, 1864-66.

Douglas and Scott.—British Hemiptera-Heteroptera. Ray Society, 1865.

Saunders.— ,, Trans. Ent. Soc, 1875, p. 117, 245: 1876, 513.

Walker.—Catalogue of Heteropterous-Hemiptera parts I-VIII, 1867-73.

II.—HEMIPTERA-HOMOPTERA.

I.—Cicadina.

Family—STRIDULANTIA.—Cicadas.

Polyneura, *West.*—ducalis (Nep.), *West.*

Platypleura, *Serv.*—phalænoides (In.), Sphinx (N. I.), cervina (N. I.), straminea (N. I.), interna, *Walk.*, andamana, *Dist.*

Oxypleura, *Serv.*—sanguiflua (N. I.), basialba (N. I.), Bufo, *Walk.*

Tacua, *Serv.*—speciosa, *Ill.*

Tosena, *Serv.*—melanoptera (As., N. I.), *White:* Mearesiana (Him.), *West.:* splendida (As.), albata (N. I.), *Dist.*

Huechys, *Serv.*—phalæmata (As., N. I., Bur.), splendidula (As., N. I.), *Fabr.:* 8-notata (A.), *West.:* transversa, *Walk.*

Gæana, *Serv.*—sulphurea [=pulchella, *West.*], (N. I.), *Hope:* dives (As.), *West.*

Mogannia, *Serv.*—illustrata (N. I), *Serv.:* recta, obliqua, Locusta, lacteipennis (N. I.), quadrimaculata (N. I.), Terpsichore, *Walk.*

Dundubia, *Serv.*—obtecta (N. I.), *Fabr.:* vaginata (As.), *Serv.:* cinctimanus (As.), ramifera (As.), vibrans (As.), microdon (N. I.), lateralis (As.), Urania, Nicomache (N. I.), tigrina (Mad.), maculipes (N. I.), Samia (N. I.), varians (As.), saturata (As.), singularis, linearis (As.), *Walk.:* Radha (Mad.), Tripurasura (As.), *Distant.*

Cosmopsaltria, *Distant*—Pomponia, Tibicen, *Stâl:* Sita (Bom.), Durga (As.), Kama (Darj.), Madhava (As.), Aurungzebe (Bom.), *Distant.*

Cicada, *Linn.*—subtincta (As.), Aræa (N. I.), acorata (N. I.), subvitta (N. I.), xantes (N. I.), *Walk.:* apicalis (N. I.), *Germ.:* hemiptera, maculicollis (Ben.), *Guér.:* imperatoria (Nep.), *West.*

Fidicina, *Serv.*—vicina (As.), *Sign.:* recta (As.), corvus (As.), immaculata (Ben.), *Walk.*

Family *Cercopidæ.*

Cercopis, *Serv.*—nigripennis (As. N. I), *Fabr.:* signifera (As.), ducens (As.), pallida, dorsalis (N. I.), dorsimacula (N. Ben.), undata (As.), dorsivitta (N. I.), humeralis (As.), costalis (Mad.), hilaris (Mad.), basiclava (N. I.), egens (As.), pudens (N. I.), dubitabilis (N. I.), rotundata (N. I.), amplicollis (N. I.), decisa (Darj.), *Walk.:* bispecularis (N. I), *White:* Strongii, *West.*

Cosmoscarta, *Stál*—borealis (As.), andamana, Moorei (As.), *Distant.*

Phymatostetha, *Stál*—binotata (Sadiya), *Distant.*

Tomaspis, *Serv.*—(Monecphora) trimacula, (Sphenorhina) contigua (N. I.), intermedia (N. I.), proxima (N. I), approximans (N. I.), *Walk.*

Ptyelus, *Serv.*—nebulosus, Fabr.: costalis (N. I.), conifer, quadridens (N. I.), guttifer (N. B.), sexvittatus (N. I.), punctus (N. B.), subfasciatus (N. I.), *Walk.*

Aphrophora, *Germ.*—sigillifera (N. I.), *Walk.*

Family *Jassidæ.*

Oxyrhachis, *Germ*—tarandus (N. I.), subjecta, unicolor, rudis (N. B.), *Walk.*

Hypsauchenia, *Germ.*—Hardwickii (N. B.), *Fairm.*

Centrotus, *Fabr.*—flexuosus scutellaris, *Fabr.:* Dama, *Germ.:* Gazella, *Hoff.:* assamensis, *Fairm.:* reponens (N. B.), substitutus (N. B.), pilosus (N. I.), *Walk.:* Paria (N. B.), *Lef.*

Penthimia, *Germ.*—orientalis (N. I.), compacta (N. I.), *Walk.*

Ledra, *Fabr.*—aurita, *Fabr.*: dorsalis (As.), dilatata, plana, scutellata, fornicata (N. I.), carinata (N. B.), punctata (Mad.), chlorocephalus (N. I.), culobata, lineata (N. I.), punctifera (Darj.), obligens (N. I.), *Walk.*

Epiclines, *Serv.*—planata, *Serv.*

Tettigonia, *Germ.*—opponens (N. I.), extrema (N. I.), bella (N. I.), jactans (N. I.) *Walk.:* ferruginea (As.), *Fabr.:* rubromaculata (Nep.), Pavo (Ben.), quadrilineata (Nil.), semicircularis (Mad.), unimaculata (Cal.), *Sign.*

Jassus, *Fabr.*—(Cælidia) indica (N. I.), *Walk.*

Family *Fulgoridæ*.

Laternaria, *Linn.*—Curtiprora (As), cardinalis (Nep.), *Butler.*

Fulgora, *Linn.*—(Hotinus) candelaria (As.), *Linn.*: maculata, *Oliv.*: guttulata (In.), virescens (As.), viridirostris (As.), Spinolæ (Mad., As.), clavata (As. N. I.), geminata (Him.), *West.*: Delessertii (Mad.), subocellata [var. oculatus, *West*], (Mad.), *Guér.*: pyrorhincha, (Nep.) *Donov.*: ponderosa (As.), *Stál*: brevirostris (As.) *Butler*: andamaennsis, *Distant.*

Pyrops, *Serv.*—punctata (As. Nep.), *Spin.*: guttulata (As.), vivescens (As.), *West.*: perpusilla (N. B.), *Walk.*

Cyrene, *West.*—fusiformis (As.), *Walk.*

Aphana, *Guér*—festiva, *Fabr.*: atomaria (N. I.), *Burm.*: amabilis (As.), *Hope*: Saundersii, imperialis (As.), *White*: Caja (As.), submaculata (As.), basirufa (As.), Io (N. I.), albiflos (Mad.), dives (Mad.), delectabilis (N. I.), lectissima (N. I.), placabilis, verisamor (As.), *Walk.*: sanguinipes (As.), *Stál.*

Episcius, *Spin.*—Guerinii, *Spin.*

Polydictya, *Guér.*—basalis (As.), *Guér.*: tricolor (Mad., N. I.), *Walk.*

Lystra, *Fabr.*—dimidiata (As.), punicea (As.), *Hope*: Westwoodii (As.), *Parry.*

Eurybrachys, *Guér.*—Lepelletieri (Ben.), *Guér.*: spinosa, *Burm.*: insignis (Mad.), *West.*: æruginosa (N. I.), pulverosa (As.), reversa (As.), *Hope.*: decora (As.), punctifera (Mad.), tricolor (N. I.), subfasciata (N. I.), *Walk.*

Dichoptera, *Spin.*—hyalinata (Ben.), *Fabr.*

Dictyophora, *Germ.*—graminea, Fabr.: lineata (Ben.), pallida (Ben.), *Donov.*: indiana, despecta (Mad.), nigrimacula (N. I.), albivitta (N. B.), pallida (N. I.), leptorhina, *Walk.*

Cixius, *Latr.*—flavisigna (N. I.), Mæander, *Walk.*

Helicoptera, *Serv.*—indica (Mad.), fimbria (As.), ferruginea, *Walk.*

Derbe, *Fabr.*—mæsta (N. I.), carnosa (N. I.), *West.*

Elasmoscelis, *Spin.*—fuscofasciata (As.), *Stál.*

Issus, *Fabr.*—pectinipennis (Ben.), *Guér.*: apicalis (N. I.), *Walk.*

Flata, *Fabr.*—limbata (N. I.), *Fabr.*: marginella (As.), *Oliv.*: bombycoides (Mad.), *Guér.*: intacta (As.), completa (As.), tenella, *Walk.*

Pochazia, *Serv.*—obscura, *Guér.*: guttifera (As.), interrupta (Mad.), simulans (N. I.), *Walk.*

Flatoides, *Guér.*—orientis, truncatus (N. I.), *Walk.*

Colobesthes, *Serv.*—coromandelica, *Spin.*: conspersa (As.), *Walk.*

Pæciloptera, *Latr.*—truncata (N. B.), Linn.: ferrugata, *Fabr.*: dentifrons, *Guér.*: comma (As.), lactifera (N. I.), ocellata (Mad.), Antica, intracta (Panj.), lutescens (N. I.), *Walk.*: Maria (As.), tricolor (As.), *White:* vidua (As.), *Stál.*

II.—PHYTOPHTHIRES.

Family *Psyllidæ.*

Psylla, *Först.*—basalis (N. I.), *Walk.*

Family.—APHIDINA: plant-lice, apparently not examined.

Family *Coccidæ.*

Coccus, *Linn.*—Lacca (In.), *Kerr:* cacti (In.), *Linn.*

Ceroplastes, *Gray.*—ceriferus (Mad.), *Fabr.*

Monophlebus, *Leach.*—atripennis, *Klug:* Leachii (Mad.), Saundersii (S. In.), *West.*

III.—ANOPLURA—Lice.

References.

Westwood.—Mod. Class. Ins. II., 414, 1839: Arc. Ent. t. 6. 24, 25, 51, 57: Cab. Or. Ent. t. 3, 36. Trans. Linn. Soc. XVIII. 133 (Fulgora), XIX., 1 (Derbe) An. Mag. N. H. n. s. IX., 118.

Amyot (C. J.) et *Serville (Aud.)*—Histoire Naturelle des Insectes Hemiptéres. Paris, 1843.

Walker, F.—List of the Homopterous insects in the British Museum, Pts. I—IV., 1850-58 and Supplement, 1858: contains descriptions of numerous Indian species.

Denny.—Anoplura Britannica, 1841.

Butler.—P. Z. S. 1874, p. 97.

NEUROPTERA.

The order Neuroptera [nerve-winged] includes those insects commonly known as white-ants, May-flies, dragon-flies, scorpion-flies and ant-lions. "Of all the Linnæan orders," writes Mr. Kirby, "this appears to consist of the most discordant tribes: so that it seems next to impossible to construct a definition that will include them all, unless indeed that a varied metamorphosis is its essential character: or, to speak more largely, variety itself seems the characteristic of the insects composing it in every state, and there is scarcely a common distinctive character in their perfect state upon detecting which in any individual you may exclaim—this is a neuropterous insect." The insects of this order may, however, be distinguished from the Orthoptera and Hemiptera by the homogeneous texture of their wings; from the Hymenoptera by their oral arrangements; from the Lepidoptera by the absence of scales on the wings, and from the Diptera by the possession of four wings. The wings are membranous and transparent and are marked with nervures so arranged as to resemble fine network. The mouth is formed for bruising the food on which the insects live and is never adapted for sucking the juices of plants or animals. The abdomen does not possess a sting and is rarely furnished with an ovipositor. The antennæ are many-jointed and hair-like, and the eyes are simple. The thorax is composed of three segments closedly united together and the abdomen is attached to the thorax by its whole breadth. The insects of this order are usually divided into four classes—(1) *Pseudo-neuroptera;* (2) *Odonata*; (3) *Planipennia*; and (4) *Phryganina*, the last of which forms in some systems a separate order under the name *Trichoptera.* To the first class belong the *Termitina* or white-ants, of which no description is necessary to residents in India. They comprise males, females, and neuters, and live in societies and are omnivorous eaters in all states. In the *Ephemerina* or May-flies the mouth is entirely membranous or very short, and the posterior wings are sometimes wanting. They live in the perfect state seldom more than twenty-four hours. The *Odonata* include the great family of dragon-flies of which the larvæ and nymphs are aquatic. The *Planipennia* include the scorpion-flies in which the head is prolonged or narrowed in the form of a proboscis; the ant-lions in which the

Neuroptera.

head is not so prolonged and the aphis-lions somewhat similar to the preceding. Though the ant-lions in their perfect state approach in form the dragon-flies, they differ much in the character of their metamorphosis. The Myrmeleons undergo a complete metamorphosis and their larvæ are terrestrial in their habits and of a short stout and thick form. They usually construct a cocoon when about to undergo the change to the pupa state in which they are for the most part quiescent. In the perfect insects, the wings have fewer nervures than the dragon-flies, their eyes also are smaller and the antennæ are many-jointed. The mandibles are sharp and the maxillæ and lower lips have palpi attached to them. The female dragon-fly lays her eggs on the water in which the young larvæ are hatched and also undergo the change to the pupa state. In both states they are very active and breathe through the intestine which admits water and with it air mechanically suspended which is taken up by the tracheæ of the intestines. Although they can only walk slowly, they manage to elude their enemies by expelling the water in their intestine with such violence as to carry them a considerable distance. The genus *Hemerobius* are miniature ant-lions and prey on the Aphides in the same manner that the Myrmeleons prey on ants and other insects. The scorpion-flies have a long proboscis and are in the habit of erecting the last segments of the abdomen somewhat in the manner of a scorpion. The caddis-flies in the larvæ state form tubes of all sorts of substances within which they move about. Some of the sections of this order have been fairly worked, but very much more remains to be done.

NEUROPTERA.

I.—PSEUDO-NEUROPTERA.

Family *Termitina*—Whtie-ants.

Termes, *Linn.*—obesus (In.), Mauricianus, *Ramb.*: taprobanes, *Walk.*: ferruginosus, *Latr.*: brunneus, fatalis, *Hagen.*

Family *Embidina.*

Embia, *Latr.*—Latreillei (Bom.), *Ramb.*

Oligotoma, *West.*—Saundersii (Ben.), *West.*

Family *Perlina.*

Perla, *Geoff.*—suffusa (Nep.), *Walk.:* Duvaucelii, *Pictet.*

Isagonus, *New.*—infuscatus (N. I.), *New.*

Family *Ephemerina*—May-flies.

Polymitarcys, *Eaton*—indicus (N. I., Bom.), *Pictet.*

Palingenia, *West.*—lata (As.), *Walk.*

Ephemera, *Linn.*—immaculata, *Eaton:* exspectans, *Walker:* Bætis, *Leach:* debilis, *Walker.*

II.—ODONATA.

AGRIONINA.—Water nymphs.

Calopteryx, *Leach.*—gracilis (Bom.), *Ramb.:* smaragdina, basilaris, *De Selys:* sinensis, *Linn.:* ciliata (As.), *Fabr.*

Euphæa, *De Selys.*—dispar, *Ramb.:* lestoides, indica, *De Selys:* splendens *Hagen.*

Rhinocypha, *Ramb.*—trimaculata, unimaculata, trifaciata, quadrimaculata *De Selys:* bisignata, *Hagen:* fenestrella, *Ramb.:* lineatus, *Burm.*

Lestes, *Leach.*—viridula (Bom.), platystyla, *Ramb.*

Argia, *Ramb.*—quadrimaculata (Bom.), gomphoides (Mad.), *Ramb.*

Agrion, *Fabr.*—decorum (Bom.), microcephalum (Bom.), cerinum (Bom.), *Ramb.*

GOMPHINA.

Diostatomma, *Charp.*—rapax (Bom.), *Ramb.*

ÆSCHNINA.

Anax, *Leach.*—immaculifrons, *Ramb.*

LIBELLULINA.—Dragon-flies.

Zyxomma, *Ramb.*—petiolatum (Bom.), *Ramb.*

Neurothemis, *Brauer.*—Sophronia (Mal.), fulvia (Mal.), *Drury:* palliata, *Ramb.*

Acisoma, *Ramb.*—panorpoides (Ben.), *Ramb.*

Libellula, *Linn.*—stylata (Bom.), geminata (Bom.), intermedia, (Bom.), festiva (Bom.), Caesia (Bom.), truncatula (Bom.), trivialis (Bom.), obscura, *Ramb.:* Tikarga (Mad.), equestris (Bom.), lineata, Braminea, contaminata (Mal.), *Fabr.:* variegata, *Linn.:* Sabina (Bom.) *Drury.*

III.—PLANIPENNIA.

Family *Sialina.*

Hermes, *Gray.*—maculipennis (Mad.), *Gray.*

Chauliodes, *Latr.*—simplex (As.), *Walk.:* subfasciatus (As.), *West.:* pusillus, *M'Lach.*

Neuromus, *Ramb.*—infectus (Darj.), montanus (Sik.), fenestralis (Darj.), latratus (As.), intimus, *M'Lach.:* testaceus (As.); albipennis (Nep.), *Walk.*

Family *Hemerobina*—Ant-lions, aphis-lions.

Rapesma, *M'Lach.*—viridipennis, *Walk.*

Mantispa, *Ill.*—nodosa (As.), quadrituberculata (N. I.) lineolata (Nep.), indica (Nep.), *West.:* rufescens (Mad.), *Latr.:* Cora (Mad.), *New.*

Osmylus, *Latr.*—conspersus, tuberculatus, *Walk.*

Chrysopa, *Leach*—infecta (Mad.), *New.:* candida, *Fabr.*

Palpares, *Hagen*—patiens (N. I.), infimus (N. I.), *Walker:* pardus (N. I.); zebratus (N. I.);

Macronemurus, *Hagen*—nefandus (N. I.), *Walker.*

Stenares, *Hagen*—improbus (N. I.), *Walker.*

Formicaleo, *Hagen*—audax (Nep.), verendu (N. I.), vesanus (N. I.), minax (N. I.), pugnax (N. I.), dirus (N. I.), truculentus (N. I.), Tappa (Nep.), *Walker.*

Acanthaclisi, *Hagen*—inclusa (N. I.), *Walker.*

Creagris, *Hagen*—perfidus (N. I.), *Walker.*

Glenurus, *Hagen*—infestus (N. I.), tacitus, *Walker.*

Myrmecælurus, *Hagen*—acerbus (N. I.), implexus (N. I.), *Walker.*

Myrmeleon, *Linn.*—infensus (N. I.), morosus (N. I.), *Walker.*

Tomateres, *Hagen*—pardalis (Mad.), *Fabr.*: astutus (N. I.), *Walker.*

Idricerus, *M'Lach.*—decrepitus (N. I.), *Walker*: obscurus, *West.*

Siphlocerus, *M'Lach.*—nimius (N. Ben.), *Walker.*

Helicomitus, *M'Lach.*—insimulans (N. I.), immotus (N. I.), dicax (N. I.), verbosus (N. Ben.), profanus (N. I.), *Walker.*

Ogcogaster, *West.*—tessellata, segmentator (N. I.), *West.*

Acheron, *Lef.*—longus (Ben.), *Walker.*

Hybris, *Lef.*—angulata (As.), *Westwood.*

Glyptobasis, *M'Lach.*—dentifera (Bom., N. I.), *West.*

Ascalaphodes, *M'Lach.*—canifrons, *West.*

Family *Panorpina*—Scorpion-flies.

Bittacus, *Latr.*—indicus, *Walk.*

Panorpa, *Linn.*—Charpentieri (In.), *Burm.*: appendiculata (Mad.), *West.*: furcata (Nep.), *Hard.*

Family *Nematopterina.*

Nematoptera, *Burm.*—filipennis (Cen. In.), *West.*

IV.—PHRYGANINA.

Family *Hydropsychina*—Caddis-flies.

Hydropsyche, *Pict.*—hyalina, *Pict.*: multifaria (Mad.), *Walk.*

Stenopsyche, *M'Lach.*—griseipennis, *M'Lach.*

Family *Leptocerina.*

Dinarthrium, *M'Lach.*—ferox, *M'Lach.*

Setodes, *Rambur.*—argentifera, *M'Lach.*

Leptocerus, *Leach*—indicus (N. Ben.), *Walk.*

Polymorphanisus, *Walk.*—nigricornis (N. I.), *Walk.*

References.

Westwood.—Mod. Class. Ins. II. 5, 1839: Cab. Or. Ent. t. 34. An. Mag. N. H. n. s. VIII. 298, 376.

Rambur.—Histoire Naturelle des Insectes Neuroptères. Paris, 1832.

Pictet, F.—Histoire Naturelle des Insectes Neuroptères (Pt. I., Perlidæ: Pt. II., Ephemeridæ) Genera, 1841-3.

De Selys Longchamps, E.—Monographie des Libellulidées d'Europe. Paris, 1840.

Hagen, H.A.—The Termitina, Linnæa, XII. 1. 1857.: Bibliotheca Entomologica.

Walker.—Catalogue of the Neuropterous insects in the British Museum, Pts. I—IV. 1852-3-8.

M'Lachlan.—On the genus Neuromus. An. Mag. N. H., 4th Ser., IV., 35: Trans. Ent. Soc, 3rd ser., I., 301, 492; V., 247: J. Linn. Soc., XI., 98 (Phryganina), 219 (Ascalaphus).

Eaton.—On the Ephemeridæ, Trans. Ent. Soc., 1871, page 1. The Neuropterous fauna of Japan, *Ibid*, 1875, page 613.

LEPIDOPTERA.

The order Lepidoptera (scale-winged) comprises those insects so well known under the names butterflies and moths. In this order the metamorphosis is complete and the change to the pupa and imago states is well marked. The body comprises the head, thorax and abdomen. The head is furnished with a suctorical apparatus, eyes and antennæ. The mouth consists of filaments or threads united together to form a trunk or tube representing the maxillæ of other insects and adapted for sucking the juices on which the perfect insect lives. The base of the trunk is protected by two palpi corresponding to the labial palpi of other insects and the maxillary palpi are small and subobsolete in many species. The labrum also is small, conical or subulate, and the labium is composed of a single piece, flat and triangular. The mandibles are very small and rudimentary and are in some species sub-obsolete. The true eyes are compound, but occasionally there are two ocelli between them. The antennæ vary much in form in different groups. In the diurnal tribes they terminate in a knob, hence the name *Rhopalocera* (knob-horned): in the crepuscular groups they are usually fusiform, and in the nocturnal they are thread-like or hair-like and assume various forms, hence the name *Heterocera*. In the last group some are pectinated like the teeth of a comb; others are plumose like a tuft of feathers; and others again are branched. The three segments of the thorax are in appearance one and carry on the upper side the organs of flight and on the under side the legs. The abdomen is attached to the thorax by only a portion of its breadth and is not furnished with either a sting or an ovipositor. The scales which bear the colouring matter are attached to the frame-work of the wings by a stalk or pedicel and are laid on somewhat like the tiles on a roof. In form the scales are usually

Lepidoptera.

rounded towards the pedicel and truncated at the outer edge with a toothed border. Amongst the diurnal Lepidoptera, the wings in repose are usually folded perpendicularly, and amongst the crepuscular and nocturnal groups the wings are folded horizontally. The legs are six in number and the tarsi are five-jointed and have a pair of hooks at the end. The first pair of legs are in many species rudimentary and of no apparent use, except perhaps to clean the front of the head and the trunk. The caterpillars or larvæ possess twelve segments or articulations which are furnished beneath on the anterior segments with three short scaly legs, terminating in a cushion surrounded by hooks and on the posterior segments with from four to ten false legs. These larvæ feed on vegetable substances and before the transformation into the imago state change to a pupa or chrysalis, in which the limbs, thorax and abdomen of the imago may be seen. The corneous envelope of the chrysalis varies much in form. In *Danais chrysippus* it is of a grass-green or pink colour adorned with small spots of gold and is attached by a pedicel to its food plant. Other species form cocoons and others again bury themselves in the earth. The senses of touch, sight, hearing and smell are strongly developed, and the squeak of *Acherontia* when captured, though produced only by the air escaping from two cavities in the abdomen, may be likened to the fifth sense.

It is not so necessary to discuss the basis of classification, as the different families are sufficiently distinguished in the works quoted in the 'References' at foot. The great families of which representatives are found in the Kumaon Himálaya are the *Nymphalidæ*, *Lemoniidæ*, *Lycænidæ*, *Papilionidæ* and *Hesperidæ*. The *Nymphalidæ* are numerous both in genera and species and many are distinguished by the strength of their wings and their steady, swift flight. The Purple Emperor and the Fritillaries of British collectors belong to this family. For the most part, the insect in the pupa state is attached by a pedicel and has not the support of the slight skein of thread passed round the body which is noticed in other families. The fore-legs also are imperfect and unfitted for walking. In the *Lemoniidæ* the chrysalis is attached by a slender thread across the body. They are chiefly natives of tropical America, and in these hills but four genera have been captured by me,

Butterflies.

of which, moreover, there are few species. The *Lycœnidæ* are numerous in genera and species and include the Blues, Coppers and Hair-streaks of the British collectors. In this family the chrysalis is attached by the tail and girt by a silk thread across the body. The *Papilionidæ* include the true *Papilionidæ* or swallow-tails and the *Pieridæ* or whites. The former are always known by the apparently four-branched nervule and the spur on the anterior tibiæ. The pupa is braced or sub-folliculate and varies much in form. It never has the head pointed as in the *Pieridæ*. In India the latter family hardly bears out its English name: some, like *P. Nabellica*, are nearly black; others are blue, or are adorned with red, crimson, chrome, yellow or orange colours. The *Hesperidæ* or skippers are very numerous in species and individuals. The pupa is attached by the tail and is supported by a skein of thread around the body. This family is also marked by the possession of a pair of spurs on the middle of the hind tibiæ, and in India many species are adorned with bright colours.

The differentiation of the genera is chiefly based on the form of the legs and the form and neuration of the wings.[1] A clear appreciation of the position and nomenclature of the neuration of the wings is essential to the understanding of any description of the diurnal Lepidoptera. It would, however, lead us too far away to enter into this subject here or to discuss the interesting anatomy and transformations of this order. We have not the materials for estimating exactly the number of species of Lepidoptera found in India, but in a large collection from Bengal examined in 1865, the *Rhopalocera* numbered 409 species and the *Heterocera* 1,207 species. The single collection of the late Mr. W. S. Atkinson, examined in 1880, added 650 new species of *Heterocera;* and if we take the numerous additions made by other collectors and the species recorded by others, we have about 900 species of *Rhopalocera* and about 2,500 species of *Heterocera*, chiefly from the Bengal Presidency. The *Heterocera* of the north-west Himálaya have hardly been worked and no good list yet exists for this group. In the following lists the *Rhopalocera* represent, with few exceptions, actual captures in the tract between the Tons and the Sárda, the Dúns and Bhábar by

[1] Heinemann's description of the terminology of the Lepidoptera in Smithsonian Contributions to Knowledge, IV., M. C., 1862, is accurate and concise.

myself or others. The list of *Heterocera* contains also a number of typical species captured in Darjíling, Calcutta and western Asám, and sent me by the late Mr. W. S. Atkinson as an aid in determining species. It is to be regretted that my notes do not enable me to separate these from the species actually recorded from Upper India. This list can therefore only be taken as a record of species that may or may not occur in the tract for which the *Rhopalocera* list shows actual captures.

Hawk-moths.

The *Heterocera* include both the crepuscular and nocturnal groups, and the list gives the families recorded as occurring in the Bengal Presidency. At the foot of the list of each family the genera are noticed which, though found in India, have not yet, with few exceptions, been identified as occurring in Upper India. The tribe Sphinges or Hawk-moths affords numerous examples. They are easily recognized by their prismatic or fusiform antennæ, which are usually thickest in the middle and are terminated by a little flake of scales. They fly with great force and swiftness, so that it is most difficult to capture them uninjured, and are named from a supposed resemblance in the position usually assumed by the caterpillar to the attitude of the phinx. They pass their pupa stage in the ground. The tribe Bombyces is also very well represented in India, but the space at our disposal will not allow us to note the very interesting families comprised in it, except the *Bombycidæ*, which from its economic value and the efforts now being made to localise sericulture in the Dehra Dún demands and deserves considerable attention. We shall first reproduce the late Captain Hutton's valuable note on the family which is but little known, and coming from a practical naturalist such as he was should have wider circulation. We shall then describe the different experiments that have been undertaken to ascertain whether silk culture can be made a profitable practical industry like indigo and tea.

Silk-moths.

Notes on the Bombycidæ, as at present[1] *known to us, by Captain Thomas Hutton.*

Bombyx Mori, Linnæus.—The largest of the domesticated Chinese Bombyces, originally from China, about north latitude 32° to 34.° Also in Japan.

[1] Dated 26th July, 1871. So far as I am aware nothing has been discovered to invalidate the statements here made, and these 'Notes' may still be taken as a summary of our scientific knowledge of the silk-producing moths of India.

This has been cultivated in Europe, especially in France and Italy, as well as in Syria, Egypt, Persia, Bukhára, Afghánistan, Kashmír, in one or two localities of the Northern Panjáb, near the hills, and thrives well at Mussooree, everywhere feeding upon various species of mulberry and everywhere an annual, only *except* at Mussooree, where I can obtain two crops. This is the worm that lately failed in France after centuries of domestication. It occurs nowhere in the lowland Gangetic provinces, but its name is assigned, in ignorance, to *all* the under-mentioned species. This species has been introduced into Australia, where it is said to thrive well, although Dr. Wallace of Colchester has lately informed me that Australian eggs do not hatch so kindly and regularly in England as English-bred eggs; instead of coming forth in a swarm, they appear daily in small quantities only. This I attribute to the high temperature of Australia having acted injuriously upon the constitution, which is debilitated. The best silk of all is produced by this species, and readily sells, with good reeling, at 25 shillings per pound. Mr. Cope sold some at that rate which he produced in the Panjáb; and that reared at Mussooree fetched the same price. A splendid silk is produced by crossing this species upon the smaller monthly worm known in Bengal as the *desi*, but the crossing requires great attention, and the out-turn after all may not be worth the trouble, for, unless very closely watched and attended to, the worms will invariably revert to annuals. Silk—golden yellow when in health.

2. *Bombyx textor*, Hutton.—This species is cultivated sparingly in several parts of India, but its constitution is thoroughly worn-out, and it ought to be sent to a hill climate. At Mussooree it thrives well, and although, like the last, an annual everywhere else, here it yields a second or autumnal crop also. It was originally brought from China, near Nankin, in north latitude 32°, but is fast fading away from Bengal. It is cultivated in France and Italy and in China, as well as in Bengal, and in those countries generally produces a pure white silk; in Italy there are more white than yellow cocoons, but in France more yellow than white; this is dependent upon climate, as is well shown at Mussooree, where worms introduced from Bengal produce *white* cocoons for the first crop, but almost all yellow in the second crop. The worm being northern is impatient of heat and suffers accordingly in constitution; the silk in consequence becoming white, which, as I have elsewhere pointed out, is generally a sign of loss of constitution, not only among silk-worms, but among animals still higher in the scale of nature; the natural colour of the worm of *B. Mori* is nearly black-brindle, whereas the worms under domestication are of a sickly creamy white. So, then, the climate of France, being more temperate than that of Italy, produces more yellow than white cocoons. This species is often termed the Milanese or Italian stock, and in Bengal is known as the *bara pálu*, because its cocoon is larger than those of the so-called *desi* worms or polyvoltines. It is cultivated in Asám and, according to Dr. Royle, is there and elsewhere called "*Pat* major," although it is invariably confounded with *B. Mori*, than which it is at least an inch smaller, though in other respects closely resembling it. The cocoons are of a different texture with more floss. The silk varies in price from 18 to 22 shillings per pound. Unless it be very soon transferred to the hills, this species will certainly die out; here I could insure its life without difficulty.

3. *Bombyx Cræsi*, Hutton.—This is the largest of the monthly worms, and in Bengal passes under the native name of the Madrási or Nistri, and is as usual confounded by Europeans with *B. Mori*, although the one passes as an annual, and the other as a monthly worm. The silk is good, of a golden yellow, and the worms thrive best in a temperate climate; in Asám (*apud* Royle) it is known as "*Pat* minor." This species is cultivated in several parts of India, and thrives well at Mussooree. It is to be particularly remarked, however, that none of the Chinese species, whether annual or monthly, have hitherto succeeded in the North-Western Provinces; Dr Royle long since remarking that all the Old Company's filatures did not extend higher up the country than about 2° of north latitude, owing to the dry hot nature of the North-Western climates.

4. *Bombyx fortunatus*, Hutton.—Known to the Bengalis as the *desi* worm and, like the others, dignified by Europeans with the name of *B. Mori*. Silk—golden yellow, distributed over Bengal and other parts of Southern India; but people know so little of the distinguishing characters of species, that it becomes very difficult to say what species is alluded to in magistrates' reports, unless the native name is mentioned. This also is one of the polyvoltines. A sure mark of distinction between the worm of this species and that of any of the others exists in the fact that when near maturity it becomes of a dull leaden blue color. This species thrives best in the cold weather. It is very small, but yields a good cocoon, although the returns of silk are said to be uncertain; there are no dark worms observable among them. The worm is figured in the second part of my paper "On the Reversion and Restoration of the Silkworm."

5. *Bombyx sinensis*, Hutton.—This is known as the "*Stna*" of Bengal, but, like the others, it originally came from China; it is very prolific, and even at Mussooree goes on yielding crop after crop up to the middle of December. The cocoons vary in colour, some being white and others yellow, while others even have a beautiful faint greenish hue. These changes clearly show that the health of the worm is becoming impaired. There is a peculiarity about these also which may enable the tyro to distinguish them from any of the others; while all the other species hatch slowly during the morning, from six to twelve o'clock, the *Stna* worms come forth all in a batch, and continue hatching all day and all night.

6. *Bombyx arracanensis*, Hutton.—This I have only once been able to procure and the worms died off soon after hatching. The cocoon is said to be larger than those of the Bengal monthlies, but very little beyond the fact of its existence appears to be known. As the species is supposed to have been introduced from Burma, it may probably turn out to be the same as that which was lately reported to exist in Burma.

7. *Bombyx*——?—I have heard of a species which in Central India is said to yield three crops of silk in the year, and that as soon as they are hatched the worms are placed out upon mulberry trees and left there until they spin the cocoon. Some of the cocoons were kindly sent to me, but were so crushed in transit that they were destroyed; the cocoons were small, but the silk was good, of a pale colour and something like that of *B. fortunatus*. The following, with the

exception of *B. Huttoni*, are little known. Mr. F. Moore wishes to place them in a separate genus under the name of "*Theophila*," one of his chief characters being the rows of spines on the larvæ; I object, however, to the establishment of this genus, because, in truth, we know little or nothing about them, and as to the spines, two species only are as yet known to possess them; nevertheless, they certainly do not stand properly under the genus *Bombyx*, but we must wait yet awhile in order to ascertain whether all can be included in the same genus. (*B. Horsfieldi* (Moore) is a native of Java.)

8. *Theophila Huttoni*, Westwood. Cab. Or Ent. *t.* 12 *f* 4. —This is a wild mountain species, feeding on the indigenous mulberry of Simla, Mussooree and Almora. I first discovered it at Simla in 1837, and afterwards in great abundance at Mussooree. In some years they swarm to such an extent that by the end of May, the worms of the first, or spring brood, have thoroughly denuded even large forest trees, not leaving a single leaf. In this predicament they quit the tree in search of another, which they generally find near at hand, and which is then soon thickly covered with cocoons spun in the leaves; but if, unfortunately, they fail to find a tree at hand, the whole brood perishes, the most forward worms spinning cocoons among shrubs and grass. The trees thus denuded, instead of dying, are in another month once more in full leaf, as if nothing had happened. *T. Huttoni* is a strong and hardy species, yielding a beautiful soft, whitish silk; and although the worm is too intractable and wandering to be treated in the usual manner in the house, yet I am by no means sure that it cannot be turned to good account by collecting the cocoons from the trees, as was evidently done in the outset by the Chinese with respect to *B. Mori*.

9. *Theophila bengalensis*, Hutton.—If the species discovered some years ago in Bengal by my friend Mr. A. Grote is correctly figured in my paper No. 2, just alluded to, then that sent to me from Chota Nagpur in 1869, by Mr. King, must be distinct, for it is in all respects as to shape, colouring, markings, &c., a perfect miniature of *B. Huttoni*; that it is distinct, however, is shown in the smaller size both of larva and imago, as well as in its being a polyvoltine instead of a bivoltine like *B. Huttoni*. In Chota Nagpur the food was the leaf of *Artocarpus Lakoocha*, upon which tree likewise Mr. Grote found his specimens; but as the latter gentleman was in the habit of employing an accurate native delineator of insects, I much doubt any error occurring in the figure kindly supplied by him to me, and therefore am inclined to regard Mr. King's species as distinct from Mr. Grote's, and would term the Chota Nagpur insect *Bombyx* (Theophila) *affinis*, (nob.) in reference to the remarkable affinity to *B. Huttoni*, in all its stages.

10. *B. affinis*, Hutton.—When the young worms hatched at Mussooree from eggs and cocoons were sent from Chota Nagpur, I had no leaves of *Artocarpus* within some miles and was sadly puzzled to feed the worms; I tried, without success, the leaves of wild fig trees, *Ficus venosa*, *Morus nigra*, *Morus sinensis*, *M. multicaulis*, *M. cucullata*, *M. serrata* (wild), but all to no purpose, and I had almost made up my mind to lose the species, when it suddenly occurred to me to try the leaves of *M. indica*. With these I succeeded, the young worms riddling the hard, coarse leaf into a perfect sieve in a few minutes. Like *B.*

Huttoni, in the two first stages they were dreadfully troublesome, wandering down from the branches and spreading all over the table, but as they grew larger they became more tractable and remained tolerably quiet, eventually spinning their cocoons in the leaf like *B. Huttoni*.

When the moths appeared, there was equal difficulty in getting them to pair, and then even many of them laid no eggs; those that did so deposited them in batches and then covered them over thickly with the brush or tuft of hair at the end of the abdomen; thus the eggs of *B. Huttoni* are pale straw colour, glued to the trunk or branches of the tree, and quite naked, whereas those of *B. affinis* are of an orange colour and covered with dark hair. This renders it difficult to detect them on the bark, and the covering is probably used as a non-conductor of heat. The eggs of *B. Huttoni* are scattered along the under side of the small branches or over the bark of the trunk, whereas those of *B. affinis* are placed in patches or groups, and none of the eggs that remain without a coating of hair ever produce worms. I obtained four broods, the last being reared on the trees of *M. nigra* in the open air. I am sorry to add that none survived the winter, although the cocoons were kept in a room with a fire; thus, after all my trouble, I lost the species. The silk resembles that of *B. Huttoni*, and is equally good, although from the smaller size of the cocoons there is less of it. Mr. Grote kindly sent me a specimen of his moth which, so far as I can remember, was whitish and very much smaller than that of *B. affinis*.

11. *Theophila subnotatus*, Walker, Proc. Lin. Soc. III., 188 (1859).—Nothing more is known of this species than is contained in Mr. Walker's description of the moth, and that it was procured from Singapur by Mr. R. A. Wallace; neither the larva nor its food is mentioned. Whether this be a true *Theophila* or not we cannot tell. (*T. mandarina*, Moore, is a native of Chekiang, China.)

12. *Theophila Sherwilli*, Moore.—This is closely allied to *B. Huttoni*, but the larva is unknown; all that has been ascertained is that the specimen was obtained from a collection made by the late Major J. L. Sherwill, but whether captured in the plains or at Darjíling no one knows. People who have often collected at Darjíling assure me they never saw the species there; hence I incline to regard it as a lowlander, feeding on *Artocarpus* perhaps. All that Moore says of it is that it is "allied to *B. Huttoni* and differs from it in being somewhat larger, and of a grayer colour, the fore-wing having the apical patch, fuliginous instead of black, and it has only a single transverse discal streak (instead of the two as in *B. Huttoni*). A most prominent character is that the abdomen is tipped with black, as well as having the dark waistband."

13. *Ocinara religiosæ*, Helfer, J. A. S. Ben., VI., 4.—Although this stands as a *Bombyx*, the entire description as given by Dr. Helfer applies rather to a species of *Ocinara*. It is called the Jori silk-worm by Helfer, and the Deo-múga silk-worm by Mr. Hugon. It is said to occur in Asám and Silhet, but I have failed to elicit information from those localities. Bombyces are far less erratic than the allied genera of *Theophila* and *Ocinara*, and if indigenous in any district, there they will remain year after year, sometimes in greater, sometimes in lesser, numbers; but *Theophila* and *Ocinara* are both inconstant; plentiful one year, absent altogether the next, and with the latter sometimes for two or three

years. Hence Grote for four or five years lost sight of *Theophila bengalensis*, and no one seems to have seen Helfer's *B. religiosæ* since the time of its discovery.

14. *Ocinara Lida* Moore. (*O. Moorei*, Hutton) Cat Lep., E. I. C. Mus., II., 381.—This species is found at Mussooree, where it feeds upon the leaves of *Ficus venosa*, the larva being very like that of a *Geometra*, and spinning a small white cocoon on the leaf or against a stone beneath the tree It is too small to be serviceable. I named it after Mr. F. Moore, but he tells me it is the same as the Javanese *O. Lida*. It is a multivoltine. It feeds on the wild fig also. (*O. diaphana*, Moore, also occurs in the Khasiya hills.)

15. *Ocinara lactea*, Hutton.—This also occurs at Mussooree, feeding on *Ficus venosa* and spins a curious little cocoon of a yellow colour within the leaf; over the cocoon is laid a net-work of yellow silk, too small to be of use. It has several broods during the summer. The larva is smooth, whereas that of the preceding is hairy. (*O. dilectula*, Walker, is a native of Java.)

16. *Ocinara Comma*, Hutton.—The moth of this is white, with a dark comma-shaped mark on the disc of the upper wings; hence the name. It occurs both in the Dún and at about 5,500 feet of elevation below Mussooree.

17. *Trilocha varians*, Moore. Cat. Lep E. I. C. Mus., II., 382.—Is a small species found in Kánara; and again by Mr. Grote in Calcutta. As a silk-yielder it is of no value. For further remarks on these species, consult the second part of my paper "On the Reversion and Restoration of the Silkworm." (J. Agri.-Hort. Cal., 1864, Trans. Ent. Soc.).

18. *Cricula trifenestrata*, Helfer.—This handsome and curious species is found in various parts of India, sometimes in such numbers in the larva state as to become a perfectly destructive pest; it denudes the mango trees of every leaf, destroys the foliage of the cashew-nut, and is even said to attack the tea plants. It occurs in Burma, Asám, Maulmain, and Chota Nagpur in Central India. The cocoons are formed in clusters, so closely interwoven that they cannot be separated for reeling, which, indeed, their very texture prohibits; they are therefore carded, but are not much used; the cocoons are very irritating, from a number of minute bristly hairs from the caterpillars. I am inclined to think there are two species now standing under this name; as some cocoons are very much reticulated, while those from other localities are far more closely-woven and scarcely reticulated at all. This will never prove productive as a silk-yielder, unless the cocoons can be reduced to a gummy pulp and used for some other purposes (*C. drepanoides*, Moore, occurs in Sikkim.)

19. *Antheræa Mylitta* Drury.—This handsome species is distributed all over India from Burma to Bombay; but it has to be observed that there are in this wide range several distinct species included under the name. To separate these effectually must be the work of time, and until it is done, there can be no really good Tusseh silk produced. That several of these species are capable of producing a very valuable article of commerce is an undoubted fact, and from its cheapness and durability it would be a boon to that class of the British population which cannot afford to indulge in expensive silks. At present the native method is this: At the season when the cocoons

have been formed, the jungles swarm with them, and men sally forth to pluck them from the trees. These jungles, however, contain several distinct species, a thing of which the natives are profoundly ignorant; these cocoons are all promiscuously huddled together placed in hackeries, and carted off to the dealers. They are then sorted according to size, thickness, colour, &c., and named accordingly as a kind of trade mark, but without any reference to species. The cocoons selected for reeling are treated in the roughest manner and all kinds spun off together; those that are kept for breeding are allowed to eat out of the cocoon, as it is termed, and to interbreed, still without reference to species; and as this has been going on from time immemorial, of course the species have become blended into a most confusing cross-breed. Hence it results that if a dozen cocoons are taken at random, no two moths will resemble each other.

This system of crossing is not confined to the Tusseh group. I have detected it more than once in what were termed Japan worms imported direct from that island; indeed, I have not only detected the cross, but I have succeeded in separating the species which composed it; in one instance. I found *B. Mori* crossed with *B. sinensis*, and on another occasion *B. textor* and *B sinensis*. In the case of domesticated species there is no great difficulty to contend with, but with regard to the wild species the thing is very different, and, in short, I can scarcely yet say that I see my way at all clearly. In the Dehra Dún and extending up the hill side to about 4,500 feet, perhaps more, we have two species of Tusseh, one of which is also found in Central India; what the other is I am not yet prepared to say, Here, however, we have no artificial crossing, so that our species may be regarded as types. The difficult is to get the sexes of two moths showing marks of relationship to come forth at the same time, so as to obtain a brood and compare the larvæ with others. To trust to the reports of the unscientific would only add to the confusion. A gentleman residing in one of these silk districts kindly furnished me with cocoons of what he declared to be distinct species, and furnished me with voluminous notes, but neither the one nor the other furnish the slightest data upon which I can work or depend; that a cross exists I can see, but my correspondent is not able to enter into my views and wishes.

20. *Antheræa nebulosa*, Hutton.—This is one of the species that has been crossed upon *A. Paphia*, and it seems to be not uncommon throughout Central India. It is a well-marked species, and as specimens have been sent to England. The silk would probably rival that of *A. Paphia*.

21. *Antheræa*——*?*—I refrain from naming this until I can obtain more specimens; it is found in Central India and in the Dehra Dún. It is quite distinct from either of the foregoing.

22. *Antheræa Pernyi*, Guér. Mén.—This species was discovered in Manchuria, to the north of China, where it feeds on the oak. According to Mr. Atkinson he has captured two specimens of what he declares to be this species at Darjíling; these flew to a light placed out in the evening, but nothing further was ascertained. The great difference between the climates of Darjíling and Manchuria calls especial attention to this discovery, and leads one to wonder that the species has not been detected at Mussoorce and Simla, both farther to the north.

23. *Antheræa Yamamai*, Guér. Mén.—This is a Japan species and is well thought of both in England and in France, where great efforts have been made to introduce it, but as yet with very indifferent success. Last year I received an ounce of these eggs direct from Japan, and found them to thrive admirably on our hill oak; unfortunately my means were not adequate to the undertaking, as gauze covers were found to be indispensable in order to ward off the attacks of insects, such as bugs, the larvæ of *Coccinellæ*, spiders, &c. However, the experiment was suddenly cut short in one night when the worms were in the fourth stage, by the incursion from below of a swarm of large black ants which carried off every one. The species however is well worth another trial.

21. *Antheræa assama*, Helfer.—This is the *Múga* or *Munga* worm of Asám which produces a very excellent silk, which, if well reeled by skilful hands, instead of being carded, would be extremely valuable. I have found this species in the Dehra Dún feeding upon a tree known to the natives as "*Kirki*," but I only procured one male and have not since seen another.

22. *Antheræa Perrottetti*, Guér Mén.—Said to occur at Pondicherry, but although I long ago applied to the late M. Perrottet, he could not procure a specimen of it, although he sent *Antheræa Paphia* (vera) and *Actias Selene*. I am half inclined to regard it as a mere variety of *A. Paphia*.

23. *Antheræa Helferi*, Moore.—Is found at Darjíling, the cocoon resembling that of the common Tusseh.

24. *Antheræa Frithi*, Moore.—Is another Darjíling species, of which we know no more than of the last.

25. *Antheræa Roylei* Moore.—Is common at Simla, Mussooree, Almora, and, I think, Darjíling. It feeds upon the common hill oak, spinning a large but thin cocoon between three or four leaves. I found it at Simla in the winter of 1836 by following a flock of tomtits, one of which, after a time, began tapping so loudly that I hastened to the spot and found the little fellow hard at work on the outer cocoon, from which I drove him off and pocketed the prize. The outer coating is very strong, and I do not think it could be reeled; but within this case is the true cocoon, of an oval form and yielding a good silk. The worms are easily reared, and sometimes give two or three crops, but this is when treated in the house. The males will couple with *Antheræa Paphia*, but the produce never comes to anything.

26. *Antheræa*——?—This is a species occurring near Bombay and discovered by the Messrs. Robertson of the Civil Service, who regard it as allied to *A. Yamamai* of Japan. From the rough sketch of the cocoon sent me it certainly appears to differ from *A. Paphia*, though I do not think it can possibly be *A. Yamamai*. (*A. Mezankooria*, Moore, occurs in Asám and *A. andamana*, Moore, in the Andamans).

27. *Antheræa*——?—Nothing is known of this species, except that I possess a well-formed (probably male) cocoon of about the size of one of the *B. Mori*; the peculiarity exists in there being no vestige of a pedicel or safety rope, the cocoon being equally perfect at both ends. Unfortunately the label has been lost, and I have not the least recollection of where it came from or who

sent it, although I incline to think it came from Madras. I am particularly anxious to obtain living specimens of this, which is not only an undescribed species, but promises to be a valuable silk-yielder. These remarks will serve to show how much scientific work yet remains to be done in this single genus of *Antheræa*.

28. *Attacus Atlas*, Linn.—This is the largest of the real silk-spinners. Is common at 5,500 feet at Mussooree and in the Dehra Dún; it is found also in some of the deep warm glens of the outer hills. It is also common at Háwalbágh near Almora, where the larva feeds almost exclusively upon the "*Kilmora*" bush or *Berberis asiatica*; while at Mussooree it will not touch that plant, but feeds exclusively upon the large milky leaves of *Excœcaria insignis*. The worm is perhaps more easily reared than any other of the wild *Bombycidæ*, producing a very large and well-stuffed cocoon of a grey colour and somewhat difficult to unwind; a strong ley of potash appears to be the best solvent. The species is also abundant in Cachár, Silhet, and is found also at Akyáb, in Arrakan, as well as in China.

29. *Attacus Edwardsii*, White (P. Z. S., 1859).—This species was discovered at Darjiling and is much darker in colour than the other, and rather smaller in size, but nothing seems to be known of its food and silk.

30. *Attacus Cynthia*, Drury (Ms. II, *t.* 6 f 2).—Abundant at Mussooree, feeding on various wild plants; common in China, where it feeds on *Ailanthus glandulosa*; found in Asám, Cachár, Ságar. Although it is commonly reported to be under cultivation in different places (*vide* Colonel Agnew's Assam Report), yet such is not the case, the *Attacus ricini* being in India invariably mistaken for it. Indeed until a few years ago, when I pointed out the fact, *Attacus Cynthia* was not known to occur in India, the other species passing under that name, as the silk-worms did under that of *B. Mori*. *Attacus Cynthia* has been imported into France and England and reared out in the open air on trees of *Ailanthus glandulosa*; it has likewise succeeded to some extent in Australia, and I believe they have it also at the Cape of Good Hope. There are difficulties attending the reeling of the silk as there is with all the *Attaci*, but nevertheless the French have succeeded in turning out some very good silk pieces. In England it is not quite so highly thought of as it once was. In Australia Mr. C. Brady has produced silk from it.

31. *Attacus ricini*, Jones (Trans. Linn. Soc., 1804, p. 42).—This is the worm that produces the silk known to the natives as the Arindi silk (from *arand*, the vernacular name of the castor-oil plant); it is easily reared and feeds on the castor-oil plant, *Ricinus communis*. The silk is obtained by carding. The chief places of cultivation are Asám, Rangpur, and Dináipur, in Eastern Bengal, not at Dinapur, as stated in one of Dr. Bennett's reports. It is also cultivated in smaller quantities in other places. The Mekirs to the eastward possess a very fine kind with white silk. *Attacus ricini* thrives well at Mussooree, and has been introduced into France, Algeria, Malta and other places.

32. *Attacus Guerini*, Moore.—Is known only from a few specimens of the moth in some museum in England, and I am induced to regard it as no more than an ill-fed specimen of *A. ricini*. I have failed to procure it from any part of the

country, though I have seen an approach to it in ill-fed specimens of the former in my own trays. This underfeeding or semi-starvation is well exemplified in some very Lilliputian specimens of *Actias Selene*, received from a gentleman who reared it at Serampur, near Calcutta, where he only supplied the worms with food twice a day; the moths are only a quarter of the natural size. (*Attacus silhelica*, Hélfer, occurs in Silhet: *A. canningi*, Hutton, in the N.-W. Himálaya: *A. lunula*, Walker, in Silhet: *A. obscurus*, Butler, in Cachár).

33. *Actias Selene*, Hübner.—Very common in a wild state at Mussooree, where it feeds on the wild cherry, wild pear, walnut, *Cedrela paniculata*, (?) *Coriaria nepalensis*, and several other forest trees and shrubs. It occurs also at Almora, Darjíling, Asám, Cachár, Ságar, and at Serampur, near Calcutta. Mr. C. Turnbull failed to reel silk from the cocoons sent down from this, but it has been reeled, though there is not much of it.

34. *Actias Mænas*, Doubleday.—Occurs at Darjíling and is a very large species, but nothing has been recorded of its habits, food, or produce.

35. *Actias Leto*, Doubleday.—Is another Darjíling species, the economy of which has yet to be ascertained. (*Actias sinensis*, Walker, occurs in N. China, and *A. ignescens*, Moore, in the Andamans).

36. *Saturnia pyretorum*, Boisduval.—Occurs at Darjíling and in Cachár, but nothing more is known of it.

37. *Saturnia Grotei*, Moore (P. Z. S., 1859).—Has been found at Darjíling and one or two specimens have been captured at Mussooree; but collectors of moths make no inquiries as to economy, and for all practical purposes the species might as well remain unknown. I am inclined to think that the larva feeds on the wild-pear tree (*Pyrus variolosa*).

38. *Saturnia Lindia*, Moore.—Of this nothing more is known than that it occurred in a collection made by the late Captain J. L. Sherwill, and is supposed to be from Darjíling or its neighbourhood. It is allied to *Saturnia Grotei*.

39. *Saturnia Cidosa*, Moore.—From Captain J. L. Sherwill's collection also, and from North-Eastern India, but we have no information regarding it. From its being closely allied to *Saturnia pyretorum*, I should be inclined to suppose it an inhabitant of Darjíling or Cachár.

40. *Neoris Huttoni*, Moore.—Found by myself at Mussooree at about 6,500 feet of elevation, feeding on the wild-pear tree. The larvæ are to be found in April. The cocoon is an open net-work, and would produce no silk.

41. *Caligula Simla*, Westwood.—Occurs at Simla, Mussooree, and in Kumaon, feeding on the walnut, *Salix babylonica*, wild pear tree, &c.; but the cocoon is a mere coarse open net-work, through which the pupa is visible, and yields no silk.

42. *Rinaea Thibeta*, Westwood.—Occurs at Mussooree, where I have taken it on *Andromeda ovalifolia*, wild pear, and common quince. It occurs also in Kumaon, but the specific name is a misnomer, the insect never approaching

Tibet. Specimens were taken out of a collection made in Kumaon, and because the collector travelled into Tibet it was ridiculously enough called a Tibetan collection, and the species named accordingly. The cocoon is a coarse open net-work, through which the larva is visible, but there is no available silk.

43. *Loepa Katinka*, Westwood.—A very beautiful yellow moth discovered originally in Asám, occurring also, according to my ideas, at Mussooree. Mr. Moore, however, considers mine as distinct. I am not quite satisfied that the cocoon will not yield silk, but there is very little of it.

44. *Loepa sivalica*, Hutton.—Closely allied to the last, and found at Mussooree at about 5,500 feet and lower. It will probably yield a small quantity of silk.

45. *Loepa Miranda*, Atkinson.—Found by him at Darjíling; a good and handsome species, but nothing more is recorded of it.

46. *Loepa sikkimensis*, Atkinson.—A very beautiful species found by Mr. Atkinson at Darjíling. It may be known from the others by the smaller size, and by the wings being clouded with maroon. Of its economy nothing is known. Three or four other species of this family occur in Darjíling and Silhet, but beyond their existence nothing is recorded.

(The following silk-producing species also occur:—*Rinaca Zuleika*, Hope, in Sikkim: *Salassa Lola*, Westwood, in Sikkim: *Rhodhia newara*, Moore, in Nepál: *Caligula cachara*, Moore, in Cachár: *Neoris Shadulla*, Moore, in Yarkand: *Neonis Sioliczkana*, Felder, in Ladák: *Saturnia Anna*, Moore, in Sikkim.

Those species which, like *Actias Selene* and *Antheræa Paphia*, weave strong compact cocoons, perfectly closed at both ends, are furnished on each shoulder with a hard wing spur for the purpose of separating the fibres when the moth is ready to come forth; it may be heard grating against the silk and the point may often be seen protruding. It is common to the genera *Actias* and *Antheræa* and was discovered by myself. In *Attacus*, *Neoris*, and *Loepa* the upper end of the cocoon is left open, the fibres pointing forward, closely arranged, like the fine wires of a mouse-trap. No spine is needed in these genera. In *Bombyx* and others, although the cocoons are entire, the silk is loosely woven, and the fibres, being moistened by an acid from the mouth, are then easily separated by the claws on the fore-feet of the moths.

This is about the state and extent of our knowledge of the *Bombycidæ* of India; that there are many other species yet to be discovered no naturalist will think of denying. Nature is the book through which the Almighty teaches man to look from earth to heaven, and as His works and knowledge are boundless, so has this beautifully illustrated book no end.

[1] There are are two valuable papers published in the J. Agri-Hort. Soc. Cal. by Captain Hutton in 1864: (I) "On the reversion and Restoration of the Silk-worm, Part I.; and (II.) Part II., with distinctive characters of silk-producing *Bombycidæ*;" both these are too long for reproduction here.

Experiments with the Japan silk-worm.

The following communication regarding certain experiments made by Captain Hutton[1] with the Japan silk-worm also deserve reproduction here. He writes that he received the eggs in the beginning of March, when they were just beginning to hatch. This process went on very irregularly for many days, showing that the worms were not in a healthy state. He goes on to say :—

"When first hatched the worms had the head and prolegs shining jet black, the anterior segment ashy white, and the rest of the body as usual covered with small tufts of short hair of a pale brown. After the second moult the worm had a good deal of the appearance of the little China monthly worm (*B. sinensis*) known in Bengal as the '*Stna* or *China*;' the markings and smallness of the worm being in some instances quite those of that species, while others of the same age appeared much larger and very much resembled the worms of *B. Mori* or *B. textor*, being of a sickly white with the usual semilunar spots on the back. Like the worms of *B. sinensis*, however, they grew very slowly until the last stage, when the increase in size was rapid and the worms bore all the appearance of a *bara pálu* or a dwarf, *B. Mori* being at maturity about 2½ inches long, which is the size to which *B. textor* attains at Mussooree. For a long time I was sorely puzzled to make out what the worm could be, for the variety in the marking of different individuals was so great and so often changing at the time of moulting that I began to think the worm must be distinct from any known species, until suddenly the mists of doubt were entirely dispelled by the appearance of a *black* worm in all respects identical with those of my reverted *B. Mori*. From that moment I began to see my way, and when at length on the 2nd of May, just 26 days after hatching, the worms began to spin their cocoons it was perfectly evident that the worm, about which the French have gone mad, and the silk-cultivating world has made such a fuss, is nothing more than a *hybrid* or cross between the true sickly *B. Mori* and the little monthly *B. sinensis* or '*Stna*.'

According to the labels attached to the wooden tubes in which the eggs arrived one batch should have produced '*white*' cocoons, and the other '*green*;' yet both have spun them of the same size and shape, and *all are of a pale sulphur yellow*, except that of the solitary black worm, which is decidedly as to size and colour an undersized specimen of *B. Mori* of Kashmír and China. The moths, which came out on the 19th May, are miniatures of the pale unhealthy specimens of *B. Mori*, being ashy white with a faint transverse brown line on the upper wing. I have preserved some of the eggs wherewith to carry on my observations, and ascertain whether eventually the cross will wear out as in other instances, and the worms revert to the annual *B. Mori*. Further than this I do not consider the worm worth cultivating as the uncrossed races from which it is derived are to the full as good or even better in every respect, for the *B. Mori* can only be deteriorated by such a cross. I have long known these cocoons, having received specimens both from Mr. Moore of the E. I. Museum and from M. Guérin-Méneville with a request to mention to what species they belonged; I decided that they were the produce of *B. sinensis*, but without any idea then that the worm had been

crossed. In the colour and size of these cocoons we recognise the influence of the small polyvoltine *B. sinensis*, and in the shape and texture the influence of *Bombyx Mori*. As to the univoltine-polyvoltine character of the worms, all will depend upon climate, and the degree of influence exercised over individual worms or moths by the species from which they spring, and no purchaser of eggs in Japan, China or elsewhere can ever be certain that he has secured a batch of either univoltine, bivoltine or polyvoltine worms, because all experiments hitherto tried in the crossing of the various species of silkworms have invariably shown that there is always a strong tendency to revert to the strongest and healthiest species. I found this to be the case in my own experiments in crossing *B. Mori* of Kashmír with *B. Cræsi*, the *Nistri* of Bengal. A cross between a univoltine and a polyvoltine species will produce eggs some of which will be polyvoltine for a time, others will be bi-or tri-voltine, but the majority (unless in a hot climate) will revert at once to univoltines or annuals. Climate or temperature, as I long since remarked, will influence the colour of the cocoons, and this is shown in the fact that instead of '*white*' and '*green*' cocoons my Japanese worms have all produced sulphur yellow cocoons."

SERICULTURE.

Captain Hutton's experiment.

In 1856, Captain Hutton brought to the notice of Government the existence of several species of silk-producing moths in Mussooree and the Dehra Dún, and suggested that steps should be taken to ascertain whether they would submit to domestication like the silk-moth (*Bombyx Mori*) of China. His proposals were accepted, and in 1858 a grant was made to carry them out. In 1859, Captain Hutton reported that the wild mulberry tree was unfitted by slowness of growth for extended operations and that the quick-growing Chinese plant was not attractive to the *Bombyx Huttoni*, the subject of his experiment. Further, that the worms of this species, were irreclaimably wild even when crossed with other species and therefore that the experiment had failed both as regards the insect and the tree. He showed, however, that the climate was admirably adapted for sericulture and advocated further attempts with other silk-producing moths and other trees. The grant was, however, withdrawn and sericultural experiments were left to individual effort for some time. In 1850, the Chinese mulberry (*Morus chinensis*) was introduced by Dr. Jameson, and subsequently propagated in the Dún, where it throve luxuriantly, as well as a variety known as *M. multicaulis*, both of which are eminently suited for silk-worm breeding. The latter is said to be a variety of *M. alba* though,

according[1] to Mr. Duthie, it now varies much from the great shrub described under that name.

In 1867, Captain Murray commenced a series of experiments with seed imported from Bengal and obtained good returns in quality and quantity. In the meantime the Government gardens had distributed cuttings and plants of the better kinds of mulberries to all who desired to propagate them, but nothing of importance was undertaken and sericulture remained in the purely experimental stage in the hands of private individuals until 1874, when Mr. H. Ross commenced a plantation of mulberries on a large scale at Ambiwála in the Dún.

Mr. Ross's experiments.

By the end of 1875 Mr. Ross had twenty acres of young trees not old enough to produce any leaf and 100 old trees fully grown. He procured silkworm seed from Japan and Kashmír, but during his absence the trees were allowed to die, and the seed was neglected. None of that procured from Kashmír hatched and not much of the Japan seed and altogether only about 48lb. of cocoons were produced and about five to six ounces of seed, a good deal of which died from want of care. The proceedings of the year 1876-77 were equally unsatisfactory, and but little progress was made. The report for 1877-78 is another record of failure, but the carelessness and neglect which were marked features in the operations of the previous year are wanting on the present occasion. The experiment was throughout the year under the personal management of Mr. Ross, whose

[1] Mr. Duthie writes:—"The plant (*M. multicaulis*) according to Bureau (De Candolle's Prodromus, Pt. XVII., p. 244) is given as one of the numerous varieties of *M. alba*. He mentions that it is cultivated in S. China, where it is considered to be the best kind for rearing silkworms. I suspect, however, that the *M. multicaulis* of N. India, whatever may have been its origin, is a very different plant now to the one known under this name both in Europe and China. M. Bureau describes the leaves of the Chinese plant as being very large, and gives, as a synonym, *M. chinensis*, a variety which was introduced by Dr. Jameson from China many years ago. The leaves of the latter are certainly very different in appearance from those of the variety known in the Dún as *M. multicaulis*, which has small thin leaves. It also differs in its behaviour under cultivation. The *M. multicaulis* of the Dún will grow easily in any kind of soil, whereas the *M. chinensis* requires a great deal of care. The effect of cultivation and climate on the many varieties of mulberry which have been grown, either for the production of fruit or for the supply of leaves as silkworm food, have added very greatly to the difficulties of botanical discrimination. This is more or less the case with all such plants whose cultivation has extended from very early periods. The characters of the original become in time obliterated or mingled with those of the several varieties which have been produced from the indigenous species. *M. multicaulis* was in leaf on the 17th January (1880), just a fortnight before any other kind in the garden."

attention to the conduct of the experiment and interest in its success was undoubted. Nevertheless, both worms and eggs failed in an unaccountable manner, the final outturn was very small, and a few villagers to whom worms were given succeeded in rearing much larger cocoons than any that were produced on the Government plantations. The records of the experiment had not been kept in sufficient detail and no data were available from which any lessons that could be relied upon for future guidance could be drawn. The eggs had been kept in Mussooree from May to January each year to prevent their hatching during the hot-weather and rains, when the climatic influences were unfavourable, and much was expected from the operations of 1878-79 to settle many of the questions of detail. The season was, however, an exceptionally unfavourable one. Mild weather, at the commencement of February caused the mulberry to shoot somewhat earlier than was customary and induced the growers to bring down the seed from Mussooree for hatching at an earlier date than usual. No sooner had the young caterpillars appeared than a succession of cold frosty days cut the mulberry shoots back and left the grubs with insufficient nourishment, resulting in small cocoons of inferior quality. The worm was not killed at once when the cocoon was fully formed, but was allowed to partly cut its way through before being destroyed; and even then no precautions were taken to dry the cocoons and the worm was allowed to decompose within and stain the fibre. Notwithstanding all these drawbacks, the report on the small quantity of silk produced was that it was superior to Bengal qualities and a valuable addition to the local supplies. The representative of a Bradford firm of silk merchants interested himself very much in these experiments, and in 1879-80 took over their supervision, the financial responsibility remaining with Government. The results were encouraging: over fourteen maunds of cocoons were brought in by private rearers, and though the quality was not first class, they gave promise of ultimate success. During 1880-81, the entire responsibility for the supervision remained in the same hands and arrangements were made for handing over the Government sericultural establishment and a considerable area for mulberry plantations. A scheme was also under consideration

Present state of the experiment.

for the establishment of mulberry plantations at intervals along the slopes of the Himálaya for the purpose of cottage-rearing. The great difficulty to be encountered is in the matter of seed, and this can only be overcome by prohibiting the rearing of seed by villagers, as the worms raised from this seed are invariably diseased and the silk suffers accordingly. It would appear that this precaution is necessary in other countries also. An expert writes (1880) :—

"In every country without exception the disease has crept in where cottagers have been allowed to rear seed. The industry has been ruined by it in Asia Minor first, then in Europe (Italy, then France); and as each country's stock became effête and diseased, it had to import seed at great expense, and commenced a drain from another country, which in turn gave the fatal impulse to seed production in the new country with the usual result, that, in hastening to become rich rapidly, the people took to breeding from inferior cocoons, instead of following their old habits of careful selection, with the consequence of deterioration and then disease amongst their stock. Thus Italy commenced a drain from Japan long ago, and as Japan stock required renewing yearly in Italy (as it would not acclimatise, *i.e.*, deteriorated yearly till it was of little or no use after the third year in Italy), this proved a constant drain and great source of revenue to Japan. Then came the failure in France, and once disease creeps in where the cottagers are allowed to breed and sell seed *amongst themselves*, it only takes about five years to ruin a country. Thus France became ruined so far as stock goes, and the industry is in a ruinous condition, as I saw last year when visiting the silk districts in the south of France. An increased drain came on Japan; the Japanese found greater profit in breeding seed—faults in which are so difficult to discover—to growing and reeling silk, which latter can be so much better judged on its merits. They got careless and greedy, and the usual result followed; they have now had the disease amongst them in Japan for I believe about six years, and the old confidence in Japanese seed is gone. Thus virtually all the seed markets are spoilt, as we know to our cost, as all our imported seed this past season was more or less diseased, and we have lost over Rs. 7,000 in bad seed, besides losing the season. To bring the importance of the question nearer home, the old indigenous Panjáb cocoon is excellent. Mr. Halsey, as an experiment, imported a few Italian eggs into the Panjáb some six or seven years ago, till when the disease was unknown. These Italian eggs brought the disease, and now the indigenous race is *ruined*, and has failed four years running. We have over Rs. 5,000 out in advances this year to rearers in the Panjáb unworked off owing to the failure again this year. There is more in this still, as the natives will not throw away their old seed; and if we give them new good seed, they will keep the two together and spread the disease amongst our new stock, and ruin us with yearly importing expenses, did we not keep a special rearing establishment out here, or else have plantations of our own in the Panjáb, on which we could keep some check on the seed used."

The only measures for preventing the rearing and distribution of cottage-reared seed that have yet been proposed are that clauses should be entered in the contract with the rearers that they should, under a penalty, bring in all the green seed-cocoons to the central stations to be destroyed there, and that they should rear no other seed than that distributed to them. The future of the silk industry is now in good hands, and so far as skill, experience and capital can conduce to arriving at success, the conditions exist. There can be no doubt that it would not repay a European to conduct the rearing process himself, but it will give the weaker members of the agricultural classes full and remunerative employment, and the European will find his place in supervising the cottage operations, supplying seed, collecting, sorting and disposing of the produce and increasing and tending the mulberry plantations.

The tribes *Noctues*, *Pseudo-deltoides*, *Deltoides*, *Pyrales*, *Geometres*, *Crambices*, *Tortrices* and *Tineines* are all represented in the Himálaya. The last three tribes have been but imperfectly worked and the microlepidoptera of India may be said to be almost unknown to science. For beauty of colouring and for economic study the *Tineines* yield to none. As observed by a distinguished naturalist, "the wings frequently combine with extreme beauty of colouring the most brilliant little stripes and masses of shining silver and burnished gold which under the microscope exhibit a most radiant richness. This lustrous aspect of many species is but a poor recompense for the injury which we receive from many more while in the larva state. These clothe themselves at our expense in the warmest woollen garments which they traverse in all directions, leaving behind a gnawed and well-worn path so thin and bare as to yield to the slightest pressure. They also destroy furs, hair, feathers and many other articles of domestic economy and are the exterminating pests of zoological museums." The sugar-cane is attacked by a borer in the Maurities and West Indies identified as the caterpillar of *Phalæna saccharalis*, Fabr. (=*Diatræa sacchari*, Guilding) and the same or an allied species occurs in Rohilkhand. Our grain is also liable to great damages from moths, and in the Bombay Presidency the cotton suffers from the ravages of a small species (*Depressaria gossypiella*) which deposits its eggs in the germen at the time of flowering and the larva feeds on the cotton seeds until the pod is

ready to burst, a little previous to which it opens a round hole in the side of the pod through which it descends to the ground, and burrows into it about an inch, and there assumes the pupa state. The perfect insect is dark fuscous brown, the head and thorax somewhat lighter in colour: fore-wings with an undefined round blackish spot on the disk a little above the centre of a fascia of the same colour, crossing the wings a little above the apex, which itself is black: under-wings silvery grey, darker towards the hinder margin. The only way to arrest its ravages is to dig the soil slightly around the roots of the plant and either collect it to the depth of an inch and burn it or collect the pupæ and burn them or apply a caustic solution of lime. Space and time do not allow us to note the many species useful to man or destructive of man's labours, and we hope that the day is not far distant when some of the many labourers in this field of Natural History will give us a series of manuals fitted for the systematist and the economical observer. Every county in England has an almost complete list, but there is not even an attempt at one yet for any order of the insect fauna of India.

References.

Papillons exotiques, &c., by P. Cramer, with supplement by Stoll, Utrecht, 1775-82. In Latin and Dutch, with coloured plates, and giving the type of many Indian species.

Catalogus systematicus ad Cramerum, by H. Verloren. Traj. ad Rhen. 1837.

Sammlung exotischer Schmetterlinge of J. Hübner: *ed.* Geyer. Augsburg, 1806-41: contains numerous Indian genera.

Species général des Lépidoptères, by Boisduval and Guenée: Rhopalocères, Paris, 1836: Noctuélites, by Guenée, 1852: Deltoïdes et Pyralites, 1854, and Uranides et Phalénites, 1857.

British Museum lists, by Gray and Walker: 1854 onwards.

A descriptive catalogue of the Lepidopterous insects contained in the Museum of the H. E. I. C., illustrated by coloured figures of new species and of the metamorphoses of Indian Lepidoptera, by T. Horsfield, M. D., London, 1828 (Part I. only published).

A catalogue of the Lepidopterous insects in the Museum of the H. E. I. C., by T. Horsfield and F. Moore. London, 1857 (2 vols. only published).

The Lepidopterous insects of Nepál, by Dr. Gray. London, 1846.

The genera of the diurnal Lepidoptera, comprising their generic characters, a notice of their habits and transformations, and a catalogue of the species of each genus, by E. Doubleday and J. O. Westwood. London, 1846-52.

Kollar's list of Lepidopterous insects in Hügel's Kaschmir, 1844.

A list of Lepidopterous insects collected in the N.-W. Himálaya by Captain Lang, R. E., by Mr. F. Moore. Proc. Zool. Soc., 1865.

A list of the same collected in the Bengal Presidency by Mr. A. E. Russell, B.C.S., Mr. W. S. Atkinson, and Captain J. Lind Sherwill, by the same. *Ibid.* December, 1865, and January and May, 1867, p. 44, 612.

Description of new Lepidopterous insects from the collection of the late W. S. Atkinson, by Hewitson and Moore. Calcutta, 1879-82.

The following amongst others contain descriptions of Indian species:—

Butler, A.—Lepidoptera Exotica: Illustrations of typical specimens of Indian Heterocera, Brit. Mus. Part v.: Cistula Entomologica: P. Z. S., 1866, p. 276: 1867, p. 84, 718: 1868, p. 221, 599: 1870, p. 724: 1871, p. 252, 518, 526: 1872, p. 26: 1874, p. 274: 1875, p. 3, 239, 391, 621: 1876, p. 136, 308: 1880, p. 147, 403: 1881, p. 602. Trans. X., 511: besides numerous papers in the Trans. Linn. Soc., Trans. Ent. Soc., Ent. Month. Mag. and Ann. Mag. N. H., 3rd Ser., XVI., 393: XIX, 49, 51, 161: XX. 217, 399: *Ibid*, 5th Ser., V., 221.

Moore, F.—P. Z. S., 1872, p. 555: 1874, p. 264, 565: 1877, p. 580: 1878, p 4, 686, 821: 1879, p. 136, 387: 1881, p. 326: Trans. XI., 63: besides papers in An. Mag. N. H., 4th Ser., XX., 43, 389: 5th Ser., I., 227: Trans. Ent. Soc., 1879, p. 9: 1880, p. 155: Ent. Month. Mag. and the Lepidoptera of Ceylon. London, 1881.

Lang.—Ent. Month. Mag. IV. 247 and 1868, p. 36.

Wood Mason and *de Nicéville.*—J. A. S., Ben., XLVII. ii. 175: L. ii. *et seq.*

The diurnal Lepidoptera of India, Burma, and Ceylon, by Captain G. F. Marshall, R.E., and L. de Nicéville. Calcutta, 1882.

Types of Lepidoptera-Heterocera in the British Museum, pts. 1—5, 1881.

Handbook of Indian Silks at South Kensington, by Wardle, 1881.

LEPIDOPTERA.

Rhopalocera.

A=submontane tract including Tarái, Bhábar, and Dúns.

B=outer Himálaya.

C=upper valleys towards and beyond the snows.

Family *Nymphalidæ.*

Danais, *Latr.*—Philomela, *Zink.*, B: Tytia, *Gray*, B, Sept.-Oct.

Radena, *Moore*—similis, *Linn.*, B.

Tirumala, *Moore*—Limniacæ, *Linn.* A: septentrionis, *Butler*, A.

Salatura, *Moore*—Genutia, A B; chrysippus, A, *Cramer*: dorippus, A, *Klug.*

Parantica, *Moore*—Aglea, A B, *Cramer.*

Euplæa, *Fabr.*—Core, *Cramer*, A: vermiculata, *Butler*, B: Deione, *West.*, B: Phænareta, *Schall.*, B, rare: splendens, *Butler*, Káli Kumaon, B.

Zophoessa, *Westwood.*—Yama, *Moore*, B.

Melanitis, *Fabricius.*—Leda, *Linn.*: Banksia, *Fabr.*: Aswa, Bela, *Moore*, A, B: Constantia, *Cramer*, B.

Neope, *Butler.*—Pulaha, B., *Moore.*

Lethe, *Hübner*—Europa, *Fabr.*, B: Dyrta, *Felder*, B: Rohria, *Fabr*, B: Verma, *Kollar*, B: Sidonis, *Hewitson*, B: Hyrania, *Kollar*, B: Visrava, *Moore*, B.

Orinoma, *Gray.*—Damaris, *Gray*: wooded lowlands.

Erebia, *Dalm.*—Kalinda, B, C, *Moore.*

Callerebia, *Butler*—Scanda, Annada, Nirmala, B, C, *Moore:* hybrida, B, *Butler.*

Rhaphicera, *Butler*—satricus, *Doub.* et *Hew.*, wooded hills beyond Almora.

Satyrus, *Latr.*—Mærula, *Felder*, C, rare: Schakra, *Kollar*, B: Menava, *Moore*, C, rare.

Epinephile, *Hübner*—pulchella (=Neoza, Lang), C: pulchra, *Felder*, C: Davendra, C; Cheena, C, *Moore*: goolmurga, Maiza, rare, Baspa valley, *Lang.*

Aulocera, *Butler.*—Saraswati, B, in rains; Padma, B, in rains, *Kollar*: Brahminus, *Blanchard*, B, common: Weranga, *Lang*, C, rare: Baldiva, *Moore*, C.: Hübneri, *Felder*, C.

Calysisme, *Moore.*—Drusia, *Cramer*, B: Blasius, A, B.; Perseus, B, *Fabr.*; Visala, B, *Moore.*

Orsotriæna, *Wallengren.*—Mandata, A, B; Runeka, B, *Moore*: Medus, B., *Fabr.*

Samanta, *Moore.*—Nicotia, *Hew.*, A, B: Nala, *Felder*, B: Lepcha, B, *Moore.*

Rohana, *Moore.*—Parisatis, C, rare, *Kollar.*

Yphthima, *Hübner.*—Nareda, *Kollar*, B: ordinata, *Butler*, B, Philomela, *Joh.* B: Sakra, Nikæa, Hyagriva, *Moore*, B: Methora, *Hewitson*, B, rare: Hübner *Kirby*, B, all in rains.

Elymnias, *Hübner.*—undularis, *Drury*, A, rare in B: leucocyma, *Godart*, rare, in Káli Kumaon.

Pareba, *Doubl.*—Vesta. *Fabricius*, A.

Telchinia, *Doubl.*—Violæ, *Fabricius*, A.

Messaras, *Drury.*—erymanthis, *Drury*, A, B.

Atella, *Doubleday.*—Phalanta, *Drury* A, B: Egista, *Cramer*, B.

Argynnis, *Fabr.*—Childreni, *Gray*, B: Niphe, *Cramer*, B, common: Clara,, *Blanch.*, B, rare: rudra, B, rare; Kamala, C, rare; Jainadeva, C, rare, *Moore:* Lathonia, *Linn.*, B common.

Melitæa, *Fabr.*—Sindura, C, very rare: Balbita, C, *Moore.*

Symbrenthia, *Hübner.*—Hyppocla, *Cramer*, B, in forest; Hypselis, *Godart*, B: Hysudra, B, rare, *Moore.*

Vanessa, *Fabr.*—Canace, B, in forest; urticæ, *Linn.*, A, B, very common: xanthomela s, *Esp.*, B, C, rare: Rizana, C, *Moore.*

Pyrameis, *Hübner.*—indica, *Herbst*, B: Cardui, *Linn.*, A, B, C, very common.

Grapta, *Kirby*—agnicula, B, *Moore:* C.-album, B, *Linn.*

Junonia, *Hübner.*—Lemonias, A; Orythia, A; Asterie, A; Almana, A; *Linn.:* Hierta, *Fabr.*, A: all occasionally in low valleys in hills before rains.

Precis, *Hübner.*—Ida, *Cramer*, B, common in rains: Iphita, A, *Cramer;* Laomedia, A, *Linn.*

Pseudergolis, *Felder.*—Wedah (Hara), *Kollar*, B, common in rains.

Kallima, *Westwood.*—Atkinsoni, Ramsayi, Buckleyi, Boisduvali, Huttoni, *Moore.*

Ergolis, *Boisduval.*—Ariadne, *Linn.*, A, rare; B, common.

Cyrestis, *Boisduval.*—Thyodamus, *Boisd.*, B, common, June: Risa, *Do.* et *Hew.*, B, rare, Káli Kumaon.

Hestina, *Westwood.*—Nama, *Doubl.*, B, rare: Mena, *Moore* (?), B, rare: persimilis, *West.*, B, common.

Euripus, *Westwood.*—Halitherses, *Dou.* et *Hew.*, B: consimilis, *West.*, B, rare.

Parthenos, *Hübner.*—Gambrisius, *Fabr.*, B, rare?

Moduza, *Moore.*—Procris, *Cramer.*

Limenitis, *Fabr.*—Ligyes, B, *Hew:* Trivena, Danava, B, *Moore:* Daraxa, *Doubl.*, rare.

Rahinda, *Moore.*—Hordonia, *Stoll.*

Neptis, *Fabr.*—Manasa, B; Ananta, B, rains; Emodes, B, rare; Narayana, B; Zaida, B; Amba, B; Vikasi, B; Soma, B; Ophiana, B; Nandina, A, B; Aceris, A, B; Jumba, B, C; Astola, B; Mahendra, B; Cartica, B, *Moore:* Magadha, *Felder*, B, C.

Athyma, *West.*—Leucothoë, *Linn.*, A, rare; B, common: Nefte, *Cramer*, B, Káli valley: opalina, *Kollar*, B: Bahula, B, rare; Cama, B; Mahesa, B; Asura, B, rare; *Moore:* Inara, *Do.* et *Hew.*, B, rare: selenophora, B; Sankara, B, C, rare, *Kollar.*

Euthalia, *Hübner.*—Lubentina, *Cramer*, B, rare, Káli valley: Doubledayii, *Gray*, B: Sahadeva, B, rare; Durga, B, not common; Garuda, B, rare; Jahnu, B, rare; Kesava, B, rare; *Moore:* Lepidea, *Butler*, B, rare: Appiades, *Men.*, B, rare, Káli: Somadeva, *Felder*, rare: all are rare and difficult to capture.

Apatura, *Fabr.*—Bolina, Misippus, *Linn.*, A: dichroa, *Kollar*, B: Namouna, *Doubleday*, B, rare.

Dichorragia, *Butler.*—Nesimachus, *Boisduval*, B, not uncommon.

Dilipa, *Moore.*—Morgiana, *West.*, B, C, not uncommon in forests.

Charaxes, *Ochs.*—Athamas, *Drury*, B: Eudamippus, *Doubl.*, B, rare: Polyxena, *Cramer*, B, not uncommon, very variable.

Family *Lemoniidæ.*

Libythea, *Fabr.*—Myrrha, *Godart*, B, in forest: Lepita, *Moore*, B, rarer.

Dodona, *Hewitson.*—Durga, *Kollar*, B, common: Egeon, *Dou.* et *Hew.*, B, rare: Ouida, *Moore*, B, common: Eugenes, *Bates*, B, rare.

Zemeros, *Boisduval.*—Flegyas, *Cramer*, B, rare.

Abisara, *Felder.*—Fylla, *Dou.* et *Hew.*, B, rare: Echeria, *Stoll*, B, rare: both near water in rains.

Family *Lycænidæ.*

Miletus, *Hübner.*—Symethus, *Cramer*, A: Drumila, *Moore*, A, a straggler.

Curetis, *Hübner.*—Thetys, A, *Drury:* Bulis, B. *Dou.* et *Hew.:* dentata, stigmata, B, *Moore.*

Cyaniris, *Moore.*—Akasa, B, *Horsfield.*

Chilades, *Moore.*—Varunana, A, *Moore:* Putli, B, *Kollar.*

Zizera, *Moore.*—Karsandra, A, *Moore.*

Tarucus, *Moore.*—Theophrastus, A, B; Plinius, A, *Fabr.:* Nara, B, C, rare, *Kollar.*

Castalius, *Moore.*—Rosimon, A, B, *Fabr.*,

Catochrysops, *Boisd.*—Strabo, A; Cnejus, A, B, *Fabr.:* Pandava, A, *Horsfield:* contracta, B, *Butler.*

Polyommatus, *Latr.*—Bæticus, A, *Linn:* pseuderos, B; dilectus, B; Chandala, A, B; Kasmira, B; albocæruleus, B, *Moore.*

Lampides, *Hübner.*—Ælianus, B, *Fabr.:* Elpis, B, *Godart:* Dipora, B, *Moore.*

Talicada, *Moore.*—(Scolitantides) Nyseus, A, rare, *Guér. Mén* (?): Vicrama, C; cashmirensis, C, *Moore.*

Lycæna, *Fabr.*—Phlæas, *Linn.*, B; Pavana, *Kollar*, B, rare: Ariana, C; Kasyapa, B, C; Zariaspa, C, Baspa valley (?), *Moore:* timeus, B, *Cramer.*

The following are not distributed :—

Plebeius, *Linn.*—Pandia, C ; Asoka, C ; *Kollar:* Zena, A; Sangra, A ; Nazira, B, rare ; Kandura, A, *Moore:* Puspa, A, *Horsfield :* Galathea (=Nycula, *Moore*), *Blanch.*,B: Stoliczkana, C ; metallica, B, C, rare; *Felder:* Laius, *Cramer*, A.

Thecla, *Fabricius.*—Deria, *Moore*, B, upper Garhwál.

Zephyrus, *Dalm.*—Syla, *Kollar*, B : Odata, B, C ; Ataxus, B ; Duma, B ; Katura, B ; *Hewitson :* icanus, B, *Moore.*

Aphnæus, *Hübner.*—Ictis, *Hewitson*, A: Vulcanus, *Fabricius*, B.

Ilerda, *Doubleday.*—Tamu, B, rare ; Sena, B, very common ; *Kollar:* Androcles, *Dou.* et *Hew.*, B : Oda, B ; Brahma, B ; *Moore.*

Camena, *Hewitson*—Ctesia, *Hewitson*, B.

Iolaus, *Hübner*—Longinus, B ; Cippus, B ; *Fabricius:* Cotys, *Hewitson*, B, rare and doubtful.

Sithon, *Hübner.*—Lisias, B, rare ; Jafra, B, *Fabr.:* Milionia, B, common ; Melisa, B, *Hewitson:* Jangala, *Horsfield*, B : Acte, B, rare ; Onyx, B ; Ravata, B ; *Moore :* last three obtained in a soldier's box, doubtful.

Myrina, *Fabr.*—Atymnus, *Cramer:* B, October in Dún.

Deudorix, *Hewitson*—Perse, *Hewitson*, B : Nissa, *Kollar*, B : Mæcenas, *Fabricius* (?).

Arhopala *Hew.*—Centaurus, amantes, *Hew.*

Amblypodia, *Horsfield.*—Diardi (?), *Hewitson:* quercetorum, B; Ganesa, B ; *Moore:* Rama, *Kollar*, B. dodonæa, B., *Moore.*

Family *Papilionidæ.*

Nychitona, *Butler*—Xiphia, *Fabricius*, A : Medusa, *Cramer* (?).

Terias, *Swainson.*—Læta, blanda, *Boisd.:* Drona, Sari, *Horsfield:* Venata, *Moore:* Rubella, fimbriata, *Wallace:* Hecabe, *Linn.:* candida, brigitta, *Cramer :* only in submontane tract and lower hills.

Huphina, *Moore.*—Remba, B, *Moore.*

Belenois, *Hübner.*—Mesentina, A, *Cramer.*

Delias, *Hübner.*—Eucharis, A, *Drury:* belladonna, B, *Fabr:* Sanaca, C, very rare, *Moore:* Pasithoe, B (?), *Linn.*

Appias, *Hübner.*—Paulina, A, *Cramer:* Galba, A, *Wallace:* Indra, A, B, *Moore:* Lalage, B, *Doubl.:* Libythea, A, *Fabricius.*

Pontia, *Fabr.*—Zeuxippe, A, *Cramer:* Nerissa, A, B, *Fabr.:* Soracta, B, *Moore.*

Metaporia, *Butler.*—Nabellica, C, *Boisd.:* Agathon, B; Caphusa, B, *Moore.*

Synchloë, *Hübner.*—Daplidice, C, *Linn.:* Canidia, A, *Sparm.:* Ajaka, B, rare, *Moore:* Brassicæ, B (*Var.* nepalensis), *Linn.*

Nepheronia, *Butler.*—Avatar, *Moore*, B, rare: Valeria, *Cramer*, A, B.

Catopsilia, *Hübner.*—Catilla, Crocale, *Cramer*, A: Gnoma, A; Ilea, A, *Fabr.:* chryseis, *Drury*, A: Pyranthe, *Linn.*, A: Pomona, *Fabr.*, A: all occur also in lower hills.

Gonepteryx, *Leach.*—Rhamni, *Linn.*, B: Zaneka, *Moore*, B, C.

Colias, *Fabr.*—Croceus, *Fourcr.*, B, very common: Fliedii, *Mén.*, B: ladakensis, *Felder*, C, rare: Erate, *Esp.*, B, very common: Hyale, *Linn.*, B.

Ixias, *Hübner.*—Marianne, *Cramer*, A: Pyrene, *Linn.*, A: Rhexia, *Fabr.*, B: two last very variable: Dharmsalæ, B; frequent, B, *Butler:* Aguiverna, C, *Moore.*

Teracolus, *Swains.*—fausta, A, *Olivier:* ochreipennis, A; farrinus, B, *Butler:* dynamene, A, *Klug.:* amatus, A, *Fabr.*

Euchloe, *Hübner.*—Ausonia (=Daphalis, *Moore*), *Hübner*, C, rare in upper Garhwál and Basáhr.

Parnassius, *Latr.*—Hardwickii, *Gray*, B, C, western Garhwál: Jacquemontii, *Boisd.*, C, western Garhwál: Stoliczkanus, *Felder*, C, from Kunáor.

Papilio, *Linn.*—Pompeus, *Cramer*, B, rare in dense forest; Clytia, A; Panope, A; Polytes, A, B; Paris, B; Helenus, B, rare from Káli Kumaon (?); Sarpedon, B; Machaon, B, *Linn.*: Agestor, *Gray*, B, rare: Aristolochiæ, *Fabr.*, B: Govindra, *Moore*, B, rare: Rhetenor, B, rare; Astorion, B, rare; Cloanthus, B, rare, *Westwood*: Erithonius, A; Protenor, B, *Cramer*: Polyctor, *Boisd.*, B: Latreillei, *Don.*, B: Nomius, *Esp.*, B, rare, Káli Kumaon.

Family *Hesperidæ*.

Badamia, *Moore*—exclamationis, *Fabricius*, A, B.

Ismene, *Swains.*—œdipodea, B, *Swains.*

Choaspes, *Moore*—Benjaminii, B, *Guér.-Mén.*

Bibasis, *Moore*—Sena, A, *Moore.*

Parata, *Moore*—chromus, A, *Cramer*: Alexis, A, *Fabr.*

Pisola, *Moore*—Zennara, A, *Moore.*

Pamphila, *Fabr.*—Druma, A; Sasivarna (?), A; Brahma, B, *Moore*: Augias, A, B, *Linn.*: Dara, B, *Kollar*: Eltola, *Hewitson*, B.: Mathias, B, *Fabr.*

Matapa, *Moore.*—Aria, A, *Moore.*

Astictopterus, *Felder.*—Diocles, A, *Moore.*

Isoteinon, *Moore.*—masuriensis, B, *Moore.*

Thanaos, *Moore.*—stigmata, B, *Moore.*

Chapra, *Moore.*—Agna, B, *Moore.*

Padraona, *Moore.*—Mæsa, A, B, *Moore.*

Ampittia, *Moore.*—Maro, A, *Fabricius.*

Halpe, *Moore.*—radians, B, *Moore.*

Taractocera, *Butler.*—Sagara, A, rare; Danna, B, *Moore.*

Hyarotis, *Moore.*—Adrastus, A, *Cramer.*

Tagiades, *Hübner.*—Menaka, A, B, common; Gopala, B, rare; Bhagava, A, rare; Dasahara, A, B, common; Ravi, A, *Moore*: Atticus, B, *Fabr.*

Udaspes, *Moore.*—Folus, A, B, common, *Cramer.*

Coladenia, *Moore*—Indrani, A, B, *Moore.*

Plesioneura, *Felder.*—Dan, *Fabricius*, B: Putra, A, B; Chamunda, A, B; Ambareesa, A, B; Pulomaya, A, B; Dhanada, A, B; *Moore:* leucocerca, *Kollar*, B.

Hesperia, *Fabr.*—Divodasa, A, *Moore:* Thyrsis, *Fabr.*, B, rare: Cinnara, A, B, *Wallace.*

Nisoniades, *Hübner.*—Tages, A, common, *Linn.*

Pyrgus.—Galba, A, *Fabr.*

II.—HETEROCERA.

Tribe—Sphinges.

Family *Sphingidæ.*

Sataspes, *Moore.*—infernalis, *Westwood:* uniformis, *Butler.*

Hemaris, *Dalm.*—Saundersii, *Walker:* Hylas, *Linn.*

Rhopalopsyche, *Butler.*—bifasciata, *Butler:* nycteris, *Kollar.*

Macroglossa, *Ochs.*—gyrans, Sitiene, *Walker:* bombylans, *Boisd.* Gilia, *Schœff.:* Lepcha, catapyrrha, hemichroma, *Butler.*

Rhodosoma, *Butler*—triopus, *Westwood.*

Lophura, *Boisd.*—asiliformis, *Fabr.:* himachala erebina, *Butler.*

Acosmeryx, *Boisd.*—cinerea, pseudonaga, *Butler:* sericea, *Walker.*

Elibia, *Walker*—dolichus, *Westwood:* dolichoides, *Felder.*

Pergesa, *Walker*—acuta, velata, macroglossoides, *Walker:* Acteus, *Cramer:* olivacea, castanea, *Moore:* ægrota, aurifera, gloriosa, *Butler.*

Panacra, *Walker*—assamensis, Mydon, variolosa, *Walker:* Bubastus, *Cramer:* vigil, *Guér.-Mén:* Minus, *Fabr.:* metallica perfecta, vagans, *Butler.*

Angonyx, *Boisd.*—Automedon, Busiris, *Walker.*

Microlopha, *Felder.*—sculpta, *Felder.*

Chærocampa, *Duponchel.*—Alecto, Thyelia, Celerio, Elpenor, *Linn.:* Clotho, Nessus, *Drury:* cretica, silhetensis, Lucasii, *Boisd.:* puellaris, macromera, fraterna, mirabilis, rosina, punctivenata, gonograpta, minor, major, *Butler:* oldenlandiæ, velox, *Fabricius:* Butus, Drancus, Lycetus, *Cramer:* pallicosta, lineosa, *Walker.*

Deilephila, *Ochs.*—lathyrus, *Walk.*: livornica, *Esper.*: Robertsi, *Butler.*

Daphnis, *Hübner*—minima, *Butler*: Bhaga, *Moore*: Nerii, *Linn.*

Philampelus, *Harris.*—Naga, *Moore.*

Ambulyx, *Walker*—substrigilis, *West.*: maculifera, rubricosa, *Walker*: junonia, liturata, rhodoptera, sericeipennis, lahora, turbata, consanguis, *Butler.*

Mimas, *Hübner.*—decolor, *Walker.*

Polyptychus, *Hübner*—dentatus, *Cramer*: timesius, *Stoll.*

Langia, *Moore*—zenzeroides, khasiana, *Moore.*

Triptogon, *Bremer.*—Dyras, indicum, *Walker*: decoratum, *Moore*: cristatum, gigas, albicans, silhetensis, oriens, massurensis, fuscescens, spectabilis, florale, *Butler.*

Daphnusa, *Walker*—porphyria, *Butler.*

Leucophlebia, *Westwood*—lineata, *West.*: emittens, *Walker*: bicolor, damascena, *Butler.*

Cypa, *Walker*—incongruens, *Butler.*

Clanis, *Hübner.*—Deucalion, bilineata, cervina, pudorina, *Walker*: phalaris, *Cramer*: exusta, *Butler*: superba, *Moore.*

Acherontia, *Hübner.*—Styx, *West.*: morta, *Hübner.*

Protoparce, *Burm.*—orientalis (convolvuli, *Moore*), *Butler.*

Pseudosphynx, *Burm.*—nyctiphanes, inexacta, Fo., *Walker.*

Diludia, *Grote*—grandis, melanomera, rubescens, vates, tranquillaris, *Butler.*

Apocalypsis, *Butler*—velox, *Butler.*

Hyloicus, *Hübner*—asiaticus, uniformis, *Butler.*

Nephele, *Hübner*—hespera, *Fabr.*

Calymnia, *Walker.*—Panopus, *Cramer.*

Tribe—BOMBYCES.

Family *Ægeriidæ.*

Sphecia, *Hübner*—repanda, contracta, *Walker.*

Melittia, *Hübner*—bombyliformis, *Cramer*: Eurytion, *Westwood.*

The following genera found in Bengal also belong to this family:—

Ægeria, *Fabr.:* Lenyra, *Walker:* Pramila, Trilochana, *Moore:* Sciapteron, *Staudinger.*

Family *Zygænidæ.*

Zygæna, *Fabr.*—caschmirensis, *Kollar* : Asoka, *Moore.*

Procris, *Fabr.*—stipata, *Walker.*

Syntomis, *Ochs.*—Schænherri, Hübneri, Latreillei, *Boisduval:* diaphana, bicincta, *Kollar:* Atereus, Cyssea, *Cramer:* Passalis, *Fabr.:* Imaon, humeralis, diptera, quadricolor, fervida, subcordata pectoralis, melas, multigutta, confinis, fusiforsmi, tenuiformis, cuprea, *Walker.*

Artona, *Walker*—discivitta *Walker:* zebraica, confusa, *Butler.*

To this family belong the genera:—Northia, Eressa, Phacusa, *Walker:* Notioptera, *Butler.*

Family *Agaristidæ.*

Ægocera, *Latr.*—Venulia, *Cramer:* bimacula, *Walker.*

Eusemia, *Dalman.*—adulatrix (= bellatrix, *West.*), *Kollar:* maculatrix, victrix, *West.:* basalis, *Walker:* Peshwa, funebris, Aruna, *Moore:* silhetensis, orientalis, distincta, dives, sectinotis, *Butler.*

Nikæa, *Moore*—longipennis, *Walker.*

Nyctalemon, *Dalman.*—Patroclus, *Linnæus.*

Vithora, *Moore*—indrasana, *Moore.*

The genera Phægorista, Cleosiris, *Boisd.*, Seudyra, *Stretch.*, belong to this family.

Family *Chalcosiidæ.*

Phalauna, *Walker*—polymena, *Linn.*

Phanda, *Walker*—flammans, *Walker.*

Nepe, *Walker.*—Perdica, *Walker.*

Milionia, *Walker*—glauca, *Cramer:* zonea, lativitta, *Moore.*

Thymora, *Walker.*—Zaida, *Walker.*

Pterothysanus, *Walker*—laticilia, *Walker.*

Epicopeia, *Westwood.*—Polydora, Philenora, *Westwood.*

Histia, *Hübner*—papilionaria, *Guérin:* flabellicornis, *Fabr.*

Cyclosia, *Hübner*—sanguiflua papilionaris, *Drury:* Panthona, *Cramer;* Midama, *Boisduval.*

Erasmia, *Hope*—pulchella, *Hope.*

Campylotes, *Westwood*—histrionicus, *West.:* Atkinsoni, *Moore.*

Chalcosia, *Hübner*—pectinicornis, *Linn.:* tiberina, *Cramer:* Adalifa, phalænaria, *Walker:* albata, *Moore,* Corusca, *Boisd.*

Pidorus, *Walker*—glaucopis, *Drury:* Zelica, Zenotea, *Doubl.*

Chatamla, *Moore*—flavescens, *Walker:* nigrescens, *Moore:* tricolor, *Butler.*

Milleria, *Schaff.*—metallica, gemina, fuliginosa, *Walker.*

Heterusia, *Hope*—tricolor, *Hope:* Edocla, sexpunctata, Risa, *Doubl.:* Ædea, *Linn.:* pulchella, *Kollar:* circinata, scintillans, *Boisd.:* shahama, *Moore:* magnifica virescens, dulcis, *Butler.*

Trypanophora, *Kollar*—semihyalina, *Kollar.*

Soritia, *Walker*—leptalina, *Kollar.*

Chelura, *Hope*—bifasciata, *Hope:* glacialis, *Moore.*

Agalope, *Walker*—basalis, *Walker:* glacialis, primularis, *Butler.*

The following genera also belong to this family :—Philopator, Atossa, Boradia, Arachotia, Cadphises, Canerkes, Codane, *Moore:* Epyrgis, *Schaff.:* Scaptesyle, Herpa, Pintia, Laurion, Retina, *Walker:* Amesia, *West.*

Family *Nyctemeridæ.*

Nyctemera, *Walker*—lacticinia, *Cramer:* maculosa, *Walker.*

Leptosoma, *Boisd.*—latistriga, *Walker.*

The genera Pitasila Arbudas, *Moore:* Zonosoma, Trypheromera, *Butler,* also belong to this family.

Family *Euschemidæ.*

Euschema, *Hübner*—militaris, *Linn.:* Bellona, discalis, *Walker.*

Family *Callidulidæ.*

Callidula, *Hübner*—Petavia, *Cramer.*

The following genera also belong to this family :—

Herimba, Datanga, *Moore.*

Family *Lithosiidæ*.

Pentacitrotus, *Butler*—vulneratus, *Butler*.

Doliche, *Walker*—gelida, *Walker*.

Cyana, *Walker*—detrita, *Walker*.

Miltochrista, *Hübner*—nubifascia, *Walker*: tessellata, mactans' *Butler*.

Teulisna, *Walker*—tetragona, *Walker*: sordida, *Butler*.

Hypsa, *Hübner*—Alciphron, *Cramer*: ficus, *Fabr.*: plana, *Walker*: semihyalina, *Kollar*: heliconia, *Linn.*: lacteata, *Butler*.

Damalis, *Hübner*—egens, *Walker*: caricæ, *Fabr.*: javana, *Cramer*: plaginota, *Butler*.

Digama, *Moore*—hearseyana, similis, *Moore*.

Neochera, *Hübner*—dominia, *Cramer*: marmorea, *Walker*: tortuosa, *Moore*.

Tripura, *Moore*—prasena, *Moore*.

Sidyma, *Walker*—albifinis, *Walker*.

Lithosia, *Fabr.*—bivitta, nigripars, conformis, *Walker*: vavana distorta, nigrifrons, *Moore*.

Manulea, *Wall*—calamaria, *Moore*.

Systropha, *Hübner*—auviflua, *Moore*.

Bizone, *Walker*.—Bianca, signa, peregrina, perornata, fasciculata, guttifera, puella, *Walker*: adita, bellissima, *Moore*: pallens, *Butler*.

Barsine, *Walker*—defecta, effracta, *Walker*: pretiosa, *Moore*.

Nudaria, *Haw.*—subcervina, margaritifera, *Walker*.

Utethesia, *Hübner*—pulchella, *Linn.*: venusta, *Hubner*: cruentata, *Butler*.

Argina, *Hübner*—dulcis, *Walker*: Astrea, *Drury*: Argus, *Kollar*: Syringa, *Cramer*.

The following genera are also found in Bengal:—Calpenia, *Moore*: Eligma, *Hübner*: Macrobrochis, *Schœff.*: Paraona, Churinga, Vamuna, Mahavira, Korawa, Hesudra, Ghoria, *Moore*: Chrysæglia, *Butler*: Simareea, Tarika, Gandhara, Collita, Katha, *Moore*: Chrysorabdia, *Butler*: Capissa, Dolgoma, Mithuna, *Moore*: Cossa *Walker*: Ranghana, *Moore*: Tegulata, *Walker*: Nishada, *Moore*:

Zadadra, Prabhasa, Lyclene, *Moore:* Æmene, *Walker:* Setina, *Schrank:* Setinochroa, *Felder:* Vitessa, Grotea, *Moore:* Tinolius, Philona, Sesapa, Pitane, Charilina, Melanchroia, Castabala, Agrisius, *Walker:* Deiopeia, *Stephens.*

Family *Arctiidæ.*

Nayaca, *Moore*—imbuta, divisa, *Walker:* florescens, *Moore:* suttadra, *Moore.*

Alope, *Walker*—ocellifera, semicincta, *Walker.*

Phragmatobia, *Stephens*—exclamationis, *Stephens.*

Creatonotos, *Hübner*—interrupta, *Linn.:* rubricosta, *Moore.*

Hypercompa, *Stephens*—equitalis, principalis, imperialis, leopardina, *Kollar:* multiguttata, longipennis, plagiata, *Walker.*

Spilosoma, *Stephens*—transiens, rhodophila, 4-ramosum, rubescens, suffusa, plagiata, *Walker:* quadriramosa, erythrozona, casigneta, *Kollar:* flavalis, sanguinalis, flavicolor, similis, *Moore.*

Aloa, *Walker*—lactinea, *Cramer:* punctistriga, candidula, diminuta, vacillans, isabellina, comma, emittens, *Walker.*

Spilarctia, *Butler*—abdominalis, *Moore:* lacteata, jucunda, Nydia, confusa, *Butler.*

The following genera also belong to this family and are found in Bengal:—Glanycus, Diacrisia, Areas, Numenes, Alphæa, Amphissa, Alpenus, Icambosida, Anthena, Zana, Dinara, Agrisius, Amerila, Ammatho, Amsacta, *Walker:* Euchætes, *Clemens:* Phissama, Carbisa, Pomprana, Rajendra, Challa, *Moore.*

Family *Liparidæ.*

Epicopeia, *West.*—excisa, lidderdalii, maculata, caudata, *Butler.*

Orgyia, *Ochs.*—plana, bicolor, *Walker.*

Artaxa, *Walker*—guttata, varians, atomaria, inconcisa, scintillans, *Walker:* limbata, *Butler:* digamma, *Boisd.*

Charnidas, *Walker*—litura, *Walker:* cinnamonea, ochracea, *Moore.*

Lælia, *Stephens*—circumdata, delineata, *Walker.*

Penora, *Walker*—venosa, *Walker*.

Deroca, *Walker*—hyalina, *Walker*: maculata, *Moore*.

Redoa, *Walker*—submarginata, clara, *Walker*: Grotei, diaphana, *Moore*: cymbicornis, *Butler*.

Euproctis, *Hübner*—plana, antica, divisa, virguncula, lunata, atomaria, lutescens, varia, latifascia, gamma, *Walker*: xanthorrhæa, vitellina, chrysolopha, *Kollar*: flavonigra, *Moore*.

Stilpnotia, *Westwood*—subtincta, sordida, *Walker*: sericea, *Moore*.

Cispia, *Walker*—plagiata, punctifascia, *Walker*.

Dasychira, *Stephens*—Apsara, Grotei, strigata, kausalia, maruta, *Moore*: (Gazalina) antica, venosata, varia, *Walker*: niveosparsa, *Butler*.

Lymantria, *Hübner*—lineata, munda, superans, lunata, incerta, concolor, marginata, grandis, *Walker*.

Asætria, *Hübner*—sobrina, albolunulata, *Moore*: cara, *Butler*.

Nagunda, *Moore*—semicincta, *Walker*.

Himala, *Moore*—argentea, *Walker*.

Apona, *Walker*—cashmirensis, *Kollar*.

Examples of the following genera belonging to this family are found in India:—Aroa, Repena, Lacida, Arestha, Antipha, Melia, Procodeca, Pantana, Naxa, Odagra, Bazisa, Gazalina, Ricina, Somera, Enome, Somena, Pandala, Nisaga, Pseudomesa, Pida, Mardara, Genusa, *Walker*: Barygaza, Caragola, Harapa, Heracula, Mahoba, Daplasa, Cadrusia, Imaus, Locharna, Barhona, Selepa, Dura, Pegella, *Moore*: Chærotriche, *Felder*: Olene, Porthetria, Psalis, *Hübner*: Jana, *Boisduval*: Leucoma, Porthesia, *Stephens*.

Family *Notodontidæ*.

Cerura, *Schrank*.—liturata, *Walker*: Prasana, *Moore*.

Cetola, *Walker*—dentata, *Walker*.

Ramesa, *Walker*—Tosta, *Walker*.

Heterocampa, *Doubleday*—argentifera, *Moore*.

Stauropus, *Germar*—sikkimensis, *Moore*: alternus, *Walker*.

Damata, *Walker*—longipennis, *Walker*.

Celeia, *Walker*—plusiata, *Walker:* auritracta, *Moore.*

Phalera, *Hübner*—Raya, Sangana, Grotei, tenebrosa, *Moore:* flavescens (?), *Walker.*

Ichthyura, *Hübner*—ferruginea, indica, *Moore.*

Nioda, *Walker*—fusiformis, *Walker.*

Paravetta, *Moore*—discinota, *Moore.*

The following genera found in India belong to this family :—Thiacidas, Mosara, Cleapa, Gluphisia, Rosama, Thosea, Setora, Chilena, Rilia, Nerice, Apela, Ptilomacra, Ceira, Pydna, Berita, Beara, Cyphanta, Gargetta, Sybrida, Dudusa, *Walker:* Menapia, Niganda, Rachia, Danaka, *Moore:* Spatalia, Hoplitis, Pheosia, *Hübner:* Lophopteryx, *Stephens:* Notodonta, *Ochs.:* Anodonta, *Boisduval.*

Family *Psychidæ.*

The genera Perina, Eumeta, *Walker*, Psyche, *Fabr.*, and Kophene, *Moore*, belong to this family in India.

Family *Limacodidæ.*

Scopelodes, *Westwood*—unicolor, venosa, *Walker.*

Notada, *Walker*—basalis, rufescens, *Walker.*

Miresa, *Walker*—albipuncta, *Schäffer:* castaneipars, *Moore:* guttifera, decedens, inornata, *Walker.*

Nyssia, *Walker*—herbifera, latifascia, *Walker.*

Neæra, *Walker*—graciosa, *Westwood:* repanda, bicolor, *Walker.*

Parasa, *Boisd.*—punica, *Boisd.:* lepida, *Cramer:* isabella, *Moore.*

The following genera also belong to this family:—Messata, Monema, Susica, Contheyla, Narosa, Neprapa, Setora, Belippa, *Walker:* Limacodes, *Latreille.*

Family *Lasiocampidæ.*

Lasiocampa, *Schrank*—Aconyta, *Cramer:* trifascia, vittata, substrigosa, decisa, *Walker:* Bhira, *Moore.*

Radhica, *Moore*—flavovittata, *Moore.*

Gastropacha, *Curtis*—caschmirensis, sulphurea, velutina, *Kollar:* undulifera, *Walker.*

Brahmæa, *Petiv*—Whitei, conchifera, *Butler:* Wallichii, *Gray.*

Eupterote, *Hübner*—discordans invalida, *Butler:* mutans, lineosa, testacea, imbecilis, *Walker.*

Dreata, *Walker*—Hades, *Walker.*

Tagora, *Walker*—glaucescens, undulosa, Patula, pallida, *Walker.*

Amydona, *Walker*—basalis, Prasana, varia, *Walker.*

Lebeda, *Walker*—latipennis, nobilis, plagifera, recta, opponens, plagiata, concolor, *Walker:* Buddha, *Lefebre:* Lidderdalii stigmata, *Butler.*

Gangarides, *Moore*—rosea, *Walker:* Dharma, *Moore.*

Trabala, *Walker*—Vishnu, *Lefebre:* Mahananda, *Moore.*

The following genera also belong to this family:—Oeona, Mustilia, Suana, Andraca, Apha, Ganisa, *Walker:* Estigena, Murlida, Mahanta, Chatra, Arguda, Bharetta, Taragama, Alompra, *Moore:* Odonestis, *Germar:* Eutricha, Metanastria, *Hübner:* Jana, *Schäff.:* Sphingognatha, *Fereld:* Pæcilocampa, Trichiura, Clisiocampa, *Stephens:* Pachyjana, Leptojana, *Butler.*

Family *Bombycidæ.*

Bombyx, *Fabr.*—Huttoni, *Westwood,* cultivated at Mussooree by Captain Hutton: textor, Crœsi, fortunatus, sinensis, affinis, *Hutton:* Mori, *Linn.*

Ocinara, *Walker*—lactea, Comma, *Hutton:* Lida, diaphana, *Moore.*

Theophila, *Walker*—bengalensis, *Hutton,* Huttoni, *west.:* Sherwillii, *Moore:* religiosa, *Helfer.*

Family *Drepanulidæ.*

Drepana, *Schrank.*—bira, Patrana, *Moore.*

Oreta, *Walker*—extensa, obtusa, *Walker:* Pavaca, Vatama, *Moore.*

Cania, *Walker*—sericea, *Walker.*

Apona, *Walker*—pallida, *Walker.*

The genera Cifuna and Arna, *Walker,* also belong to this family.

Family *Saturniidæ.*

Cricula, *Walker*—trifenestrata, *Helfer:* drepanoides, *Moore.*

Attacus, *Linn.*—Atlas, *Linn.:* ricini, *Jones:* Edwardsii, *White:* Canningi, *Hutton:* Silhetica, *Helfer:* obscurus, *Butler:* Guerinii, *Moore.*

Philosamia, *Grote*—lunula, *Walker*.

Antheræa, *Hübner*—Mylitta, *Drury:* Roylei, Frithii, mezankooria, Helferi, *Moore:* nebulosa, *Hutton:* Assama, *Helfer*.

Caligula, *Moore*—Simla, *Westwood:* Cachara, *Moore*.

Actias, *Leach*—Selene, *Macleay*, Leto, Mænas, *Doubl*.

Saturnia, *Schrank*.—Anna, *Atkinson:* Iole, *West.*: Grotei, Lindia, Cidosa, *Moore*.

Neoris, *Moore*—Huttoni, Shadulla, *Moore*.

Loepa, *Moore*—Katinka, *Westwood:* sivalica, *Hutton*, miranda sikkima, *Moore*.

Rinaca *Walker*—Zuleika, *Hope:* extensa, *Butler:* Thibeta, *West*.

Family *Cossidæ*.

Cossus, *Fabr.*—Cadambæ, cashmiriensis, *Moore*.

Zenzera, *Latr.*—Mineus, Asylas, *Cræmer:* indica, *Schaff.*: signata, pusilla, conferta, *Walker:* multistrigata, *Moore*.

The genera Phragmatæcia, *Newman*, and Rhodia, *Moore*, belong to this family.

Family *Hepialidæ*.

Phassus, *Stephens*—signifer, *Walker:* Aboe, *Moore*.

Hepialus, *Fabr.*—nepalensis, indicus, *Stephens*.

Tribe—Noctues.

Family *Cymatophoridæ*.

Thyatira, *Ochs.*—Batis, *Linn.:* albicosta, decorata, *Moore*.

Risoba, *Moore*—obstructa, repugnans, *Walker:* prominens, literata, basalis, vialis, confluens, *Moore*.

Osica, *Walker*—undulata, *Moore*.

The genera Habrosyne, Palimpsestis, *Hübner*, Kerala, Saronaga, Pitrasa, Tycracona, Sydiva, *Moore*, also belong to this family.

Family *Bryophilidæ*.

Bryophila, *Treitschke*—albistigma, literata, nilgiria, mediana, modesta, *Moore*.

Family *Bombycoidæ*.

Diphtera, *Ochs.*—atrovirens, prasinaria, vigens, nigroviridis, *Walker*: discibrunnea pallida, *Moore*.

Acronycta, *Ochs.*—pruinosa, *Guénée*: flavala, indica, bicolor, *Moore*.

The genera Gaurena, *Walker*, and Triæna, *Hübner*, belong to this family.

Family *Leucaniidæ*.

Mythimora, *Hübner*—cervina, *Moore*.

Leucania, *Ochs.*—extranea, exsanguis, *Guénée*: bistrigata, penicillata, modesta, lineatipes, adusta, subsignata, Compta, consimilis, nainica, albistigma, Howra, rufistrigosa, abdominalis, Dharma, albicosta, canarica uniformis, griseofasciata, prominens venalba sinuosa, rufescens, nigrilineosa, *Moore*: Loreyi, *Dup.*: collecta, exterior, proscripta, denotata, bivitata, sejuncta, confusa, decissima, designata, *Walker*.

Axylia, *Hübner*—renalis, fasciata, irrorata, albivena, *Moore*.

Leucophlebia, *Westwood*—lineata, *Westwood*.

Tympanistes, *Moore*—testacea, *Moore*.

Auchmis, *Hübner*—sikkimensis, *Moore*.

The genera Eschæta, *Walker*, Aletia, *Hübner*, Borolia, *Moore*, Simyra, *Ochs.*, Sesamia, *Guén*, also belong to this family.

Family *Glottulidæ*.

Chasmina, *Walker*—Cygnus, *Walker*.

Polytela, *Guénée*—gloriosæ, *Fabr.*: florigera, *Guénée*.

Glottula, *Guénée*—dominica, *Cramer*.

Calymera, *Moore*—picta, *Moore*.

Family *Gortyniidæ*.

Gortyna, *Ochs.*—cuprea, *Moore*.

Hydræcia, *Guénée*—naxiaoides, khasiana, *Moore*.

Family *Xylophasidæ*.

Xylophasia, *Stephens*—leucostigma, *Moore*.

Spodoptera, *Guénée*—nubes, cilium, *Guénée*.

Prodenia, *Guénée*—retina, ciligera, *Guénée:* infecta, subterminalis, declinata, insignata, glaucistriga, *Walker.*

Chiripha, *Walker*—involuta, *Walker.*

The genera Dipterygia, Calagramma, Neuria, *Guénée:* Rhizogramma, *Led.:* Sasunaga, Karuna, *Moore:* Thalpophila, *Hübner,* also belong to this family.

Family *Episemiidæ.*

Heliophobus, *Boisduval*—dissectus, *Walker.*

Family *Apamiidæ.*

Apamea, *Ochs.*—cuprina, pannosa, latifasciata, mucronata, strigidisca, basalis, nubila, sikkima, denticulosa, obliquiorbis, *Moore.*

Mamestra, *Ochs.*—nigrocuprea, suffusa, culta, decorata, *Moore:* Stoliczkæ, *Felder:* infausta, albiflexura, *Walker.*

Perigea, *Guénée*—tricycla, *Guénée.*

The genera Prospalta and Ilattia, *Walker:* Luperina, *Boisd.:* Pachætra, *Dup.:* Celæna, *Steph.:* Motama, chandata, *Moore,* belong to this family.

Family *Caradrinidæ.*

Caradrina, *Ochs.*—paucifera, *Walker:* cubicularis, *Hübner:* arenacia, delecta, *Moore.*

Amyna, *Guénée*—selenampha, *Guénée.*

Agrotis, *Ochs.*—aversa, correcta, basiclavis, intracta, *Walker:* quadrisigna, costigera, junctura, modesta, fraterna, placida, *Moore.*

Spælotis, *Boisd.*—indiana, *Guénée:* undulans, *Moore.*

Ochropleura, *Hübner*—venalis, spilota, *Moore:* flammatra, *Guénée.*

The genera Triphæna, Graphiphora, *Ochs.:* Epilecta, Megasema, Ochropleura, *Hübner:* Tiracola, Dadica, *Moore:* Hermonassa, *Walker:* Acosmetia, *Stephens,* also belong to this family and are found in Bengal.

Family *Orthosiidæ.*

Orthosia, *Walker*—curviplena, externa, sinens, *Walker:* rectivitta, *Moore:* erubescens, *Butler.*

Xanthia, *Guénée*—rufoflava, *Walker.*

Dabarita, *Walker*—subtilis, *Walker.*

Cirrædia, *Guénée*—variolosa, *Walker.*

The genera Ranaja, Dimya, *Moore*, and Tæniocampa, *Guén.*, belong to this family.

Family *Cosmiidæ.*

Cosmia, *Ochs.*—hypenoides, *Moore.*

Ipimorpha, *Hübner*—divisa, *Moore.*

Family *Hadenidæ.*

Polia, *Guénée*—Stevensii, *Guénée.*

Agriopis, *Boisd.*—discalis, lepida, *Moore.*

Euplexia, *Stephens*—striatovirens, discisignata, *Moore:* distorta, *Stephens.*

Eurois, *Hübner*—crassipennis, repugnans, *Walker.*

Hadena, *Treit.*—niveiplaga, auriplena, *Walker:* albinota, albidisca, auroviridis, adjuncta, siderifera, *Moore.*

Berrhæa, *Walker*—aurigera, megastigma, *Walker:* olivacea, albinota, *Moore.*

To the same family belong the following genera:—Phlogophora, *Ochs.:* Trigonophora, *Hübner:* Sarbanissa, *Walker:* Cheoupa, Nikara, Hyada, Chutapha, Appana, *Moore:* Dianthecia, *Boisd.:* Hecatera, *Guén.*

Family *Xylinidæ.*

Lithomia, *Curtis:* Xylina, *Ochs.:* Lyncestis, *Walker:* Callænia, *Hübner:* Cucullia, *Ochs.:* Jarasana, *Moore:* and Calophasia, *Stephens*, belong to this family and afford examples in Bengal.

Family *Hæmerosiidæ.*

Aphusia, *Walker*—speiplena, *Walker.*

Family *Acontiidæ.*

Xanthodes, *Guénée*—intersepta, stramen, transversa, *Guénée:* innocens, imparata, impellens, *Walker.*

Canna, *Walker*—pulchripicta, *Walker.*

Acontia, *Ochs*—olivea, tropica, *Guénée:* costistigma, basifera, signifera, turpis, triradiata, maculosa, olivacea, *Walker:* vialis, *Moore.*

Euphasia, *Stephens*—catena, *Sowerby.*

Churia, *Moore*—nigrisigna, ochracea, *Moore.*

The genera Naranga, Hiccoda, *Moore*, belong to this family.

Family *Heliothidæ.*

Heliothis, *Hübner*—armigera, peltigera, *Hübner:* perigeoïdes, succinea, *Moore.*

Raghuva, *Moore*—confertissima, *Walker.*

Sophaga, *Moore*—sinuata, *Moore.*

Dorika, *Moore*—sanguinolenta, *Moore:* aureola, *Walker.*

Masalia, *Moore*—radiata, irrorata, *Moore.*

Pradatta, *Moore*—Beatrix, bivittata, decorata, modesta, artaxoïdes, *Moore.*

Curubasa, *Moore*—lanceolata, *Walker:* cruentata, calamaria, marginata, *Moore.*

Adisura, *Moore*—Atkinsoni, leucanioides, marginalis, dulcis, similis, *Moore.*

Family *Anthophilidæ.*

Hydrelia, *Guénée*—semilugens, *Walker:* conjugata, *Moore.*

Anthophila, *Ochs.*—indecisa, marginalis, hæmorrhoida, *Walker.*

Tima, *Walker*—margarita, *Drury.*

Thalpochares, *Led.*—parvula, albida, roseana, trifasciata, quadrilineata, divisa, bifasciata, flavida, *Moore.*

Acantholipes, *Led.*—flavisigna, nigrisigna, hypenoïdes, *Moore.*

The genus Leptosia, *Guénée*, belongs to this family.

Family *Erastriidæ.*

Erastria, *Ochs.*—pallidisca, marginata, albiorbis, fusca, nubila, cidarioides, *Moore.*

Phothedes, *Led.*—bipars, *Moore.*

Bankia, *Guénée*—angulifera, erecta, lativitta, renalis, basalis, obliqua, *Moore.*

Family *Eriopidæ.*

Callopistria, *Hübner*—exotica, *Guénée:* repleta, duplicans, rivularis, *Walker.*

The genera Phalga, Methorasa, Cotanda, Lugana, *Moore*, and Ægilia, *Walker*, belong to this family.

Family—*Eurhipidæ*.

Penicillaria, *Guénée*—nugatrix, *Guénée*.

Anuga, *Walker*—constricta, *Guénée:* lunulata, *Moore*.

Varnia, *Walker*—inæqualis, ignita, *Walker:* fenestrata, *Moore*.

The genera Chlumetia, *Walker*, and Eutelia, *Hübner*, belong to this family.

Family *Placodiidæ*.

The genus Placodes, *Boisduval*, of this family is found in India.

Family *Plusiidæ*.

Abrostola, *Ochs.*—subapicalis, *Walker:* anophioides, *Moore*.

Plusia, *Ochs.*—Agramma, *Guénée:* aurifera, *Hübner:* (Anarta ?) gemmifera, verticillata, furcifera, ciliaris, nigrisigna, ornatissima, extrahens, significans, integra, tetragona, *Walker:* reticulata, pannosa, confusa, argyrosigna, *Moore*.

Euchalcia, *Hübner*, belongs to this family.

Plusiodonta, *Guénée*—chalsytoides, compressipalpis, *Guénée:* auripicta, *Moore*.

Family *Calpidæ*.

Oræsia, *Guénée*—emarginata, *Fabr.:* rectistria, *Guénée:* tentans, alliciens, provocans, *Walker*.

Calpe, *Treit.*—ophideroides, minuticornis, *Guénée:* fasciata, *Moore*.

Culasta, *Moore*, belongs to this family.

Family *Hemiceridæ*.

Westermannia, *Hübner*—superba, *Walker*.

Family *Hyblæidæ*.

Phycodes, *Guénée*—hirundinicornis, *Guénée:* tortricina, maculata, minor, *Moore*.

Hyblæa, *Fabr.*—puera, *Cramer:* firmamentum, constellata, *Guénée*.

Family *Gonopteridæ.*

Cosmophila, *Boisd.*—xanthindyma, *Boisd.:* indica, *Guénée.*

Anomis, *Hübner*—guttanivis, *Walker:* fulvida, *Guénée.*

Thalatta, *Walker*—precedens, *Walker:* fasciosa, *Moore.*

Gonotis, *Guénée*—lammargo, *Walker:* brunnea, *Moore.*

Targalla, *Walker*—infida, *Walker.*

The genera Rusicada, Ossonoba, *Walker:* Coarica, Falana, *Moore,* also belong to this family.

Family *Amphipyridæ.*

Nænia, *Stephens*—cuprea, chalybeata, *Moore.*

Amphipyra, *Ochs.*—monolitha, *Guénée:* corvus, *Matsch.:* cupreipennis, *Moore.*

The genera Tambana, Mithila, Amrella, *Moore:* Perinænia, *Butler:* Blenina, *Walker,* belong to this family.

Family *Toxocampidæ.*

Toxocampa, *Guénée*—costimacula, *Guénée:* tetraspila, *Walker:* phantasma, *Evers:* cucullata, *Moore.*

Plecoptera, *Guénée*—reflexa, *Guénée.*

Family *Polydesmidæ.*

Pandesma, *Guénée*—Quenevadi, Anysa, *Guénée.*

Polydesma, *Boisd.*—boarmoïdes, scriptilis, otiosa, *Guénée.*

Family *Homopteridæ.*

Alamis, *Guénée*—umbrina, albicincta, hypophæa, glaucinans, *Guénée:* spoliata, brevipalpis, optatura, continua, *Walker.*

Homoptera, *Boisd.*—albopunctata, infligens, solita, vetusta, *Walker.*

The genera Bamra, Oromena, Donda, *Moore,* belong to this family.

Family *Hypogrammidæ.*

Cyclodes, *Guénée*—Omma, *Van der Hœven.*

Briarda, *Walker*—cervina, decens, precedens, *Walker:* varians, *Moore.*

Avatha, *Walker*—includens, *Walker.*

Prospalta, *Walker*—leucospila, *Walker*.

Gadirtha, *Walker*—impingens, inexacta, *Walker*.

Callyna, *Guénée*—sidera, *Guénée*: monoleuca, *Walker*: semivitta, *Moore*.

Family *Catephidæ*.

Cocytodes, *Guénée*—cœrula, granulata, *Guénée*: modesta, *Van der Hœven*.

Catephia, *Guénée*—linteola, *Guénée*.

Melipotis, *Hübner*—tenebrosa, strigipennis, *Moore*.

The following genera belonging to this family are also represented:—Anophia, Erygia, Odontodes, Stictoptera, *Guénée*: Steiria, Gyrtona, Aucha, *Walker*: Zarima, Vapara, Sadaroa, *Moore*.

Family *Hypocalidæ*.

Hypocala, *Guénée*—rostrata, deflorata, *Fabr.*: efflorescens, subsatura, angulipalpis, *Guénée*.

Family *Catocalidæ*.

Catocala, *Ochs.*—unicuba, concuba, prolifica, dotata, *Walker*: Nepcha, tapestrina, *Moore*.

Family *Erebiidæ*.

Sypna, *Guénée*—albilinea, cælisparsa, omicronigera, *Walker*: plana, replicata, floccosa, brunnea, albovittata, pannosa, curvilinea, rectilinea, cyanivitta, *Moore*.

Tavia, *Walker*—substruens, punctosa, dubitaria, *Walker*: catocaloides, biocularis, *Moore*.

Anisoneura, *Guénée*—hypocyana, *Guénée*.

Oxyodes, *Guénée*—Clytia, *Cramer*.

Family *Ommatophoridæ*.

Speiredonia, *Hübner*—fiducia, Zamis (?), *Stoll*.

Patula, *Guénée*—Macrops, *Linn.*: Boopis, *Guénée*.

Argiva, *Hübner*—hieroglyphica, *Drury*: caprimulgus, *Fabricius*.

Nyctipao, *Hübner*—gemmans, *Guénée*: albicincta, *Kollar*: crepuscularis, *Linn.*: exterior, glaucopis, obliterans, conturbans, *Walker*.

Ommalophora, *Guénée*, also belongs to this family.

Family *Hypopyridæ*.

Spirama, *Guénée*—helicina, *Hübner*: cohærens, *Walker*: modesta, distans, *Moore*.

Hypopyra, *Guénée*—Shiva, ossigera, unistrigata, *Guénée*: vespertilio, *Fabr.*: restorans, *Walker*.

Hamodes, *Guénée*—aurantiaca, *Guénée*: marginata, *Moore*.

Entomogramma, *Guénée*—fautrix, *Guénée*.

The genus Beregra, *Walker*, also belongs to this family.

Family *Bendidæ*.

Hulodes, *Guénée*—Caranea, *Cramer*: Drylla, saturnioides, eriophora, Palumba, inangulata, *Guénée*.

Homæa, *Guénée*—Clathrum, *Guénée*.

Family *Ophideridæ*.

Ophideres, *Boisduval*—plana, *Walker*.

Othreis, *Hübner*—fullonica, *Linn.*: Cajeta, ancilla, *Cramer*.

Adris, *Moore*—tyrannus, *Guénée*.

Mænas, *Hübner*—Salaminia, *Cramer*.

Rhytia, *Hübner*—Cocale, hypermnestra, *Cramer*.

Argadesa, *Moore*—materna, *Linnæus*.

Phyllodes, *Boisd.*—ustulata, consobrina, *Westwood*: fasciata, *Moore*.

Potamophora, *Guénée*—Manlia, *Cramer*.

Lygniodes, *Guénée*—hypoleuca, *Guénée*: ciliata, *Moore*.

Family *Ophiusidæ*.

Sphingomorpha, *Guénée*—Chlorea, *Cramer*.

Lagoptera, *Guénée*—honesta, magica, *Hübner*: dotata, *Fabr.*: elegans, *Van der Hœven*.

Ophiodes, *Guénée*—separans, triphænoides, remigioides, basisignum, *Walker*: trapezium, *Guénée*: cuprea, adusta, indistincta, *Moore*: discios, *Kollar*.

Cerbia, *Walker*—(Thria) fugitiva, *Walker*.

Ophisma, *Guénée*—gravata, torsilinea, lætabilis, *Guénée*: certior, contenta, attacicola, *Walker*.

Artena, *Walker*—submira, *Walker*.

Achæa, *Hübner*—Melicerte, *Drury:* mercatoria, *Cramer:* Cyllota, *Guénée.*

Serrodes, *Guenée*—Mara, *Cramer.*

Naxia, *Guénée*—calorifica, circumsignata, *Guénée.*

Calesia, *Guénée*—comosa, hæmorrhoda, stigmolema, *Guénée.*

Hypætra, *Guénée*—noctuoides, Lilacii, *Guénée:* perficiens, *Walker.*

Ophiusa, *Guénée*—simillima, analis, fulvotænia, arctotænia, *Guénée:* Achatina, *Sulz.:* conficiens, properata, tumidilinea, frontalis, *Walker:* falcata, *Moore.*

Grammodes, *Guénée*—Mygdon, *Cramer:* notata, *Fabr.*

The genera Iontha, *Doubl.:* Hemeroblemma, Athyrma, *Hübner:* Fodina, *Guénée:* Dordura, Pasipeda *Moore:* and Cotuza, *Walker,* also belong to this family.

Family *Euclidiidæ.*

Trigonodes, *Guénée*—Cephise, Hyppasia, *Cramer:* maxima, *Guénée.*

Family *Remigiidæ.*

Remigia, *Guénée*—Archesia, *Cramer:* frugalis, *Fabr.:* (Girpa) opatura, optativa, *Walker.*

Felinia, *Guénée*—albicola, *Walker:* spissa, *Guénée.*

Tribe—Pseudo-Deltoides.

Family *Poaphilidæ.*

The genera Poaphila, Borsippa, Dierna, Iluza, *Walker:* Nasaya, Tochara, *Moore:* Phurys, *Guénée,* belong to this family.

Family *Thermesiidæ.*

Sympis, *Guénée*—rufibasis, *Guénée.*

Sanys, *Guénée*—pulverata, angulina, *Guénée:* Flexus, *Moore.*

Thermesia, *Hübner*—signipalpis, creberrima, reticulata, *Walker:* oblita, *Moore.*

Azazia, *Walker*—rubricans, *Boisduval.*

Selenis, *Guénée*—abrupta, *Walker:* reticulata, obscura, *Moore.*

Marmorinia, *Guénée*—Singha, Shivula, *Guénée.*

Other genera of this family are Mecodina, Capnodes, Hypernasia, *Guénée:* Ginæa, Mestleta, Singara, Fascellina, *Walker:* Durdara, Raparna, Sonagora, Hingula, *Moore.*

Family *Focillidæ.*

Zethes, *Rambuhr*—hæsitans, xylochroma, *Walker:* amynoides, *Moore.*

Cultripalpa, *Guénée*—partita, *Guénée:* indistincta, trifasciata, *Moore.*

Other genera of this family represented in Bengal are Thyridospila, *Guénée:* Harmatelia Acharya, *Moore:* Phalacra, Egnasia, Saraca, Rhæsena, *Walker.*

Family *Amphigonidæ.*

Lacera, *Guénée*—Capella, *Guénée.*

Amphigonia, *Guénée*—hepatizans, *Guénée:* comprimens, *Walker.*

Tribe—Deltoides.

Family *Platydiidæ.*

Episparis, *Walker*—varialis, sejunctalis, *Walker:* tortuasalis, *Moore.*

Family *Hypenidæ.*

Dichromia, *Guénée*—orosialis, trigonalis, *Guénée:* quadralis, *Walker.*

Rhynchina, *Guénée*—pionealis, *Guénée:* angulifascia, *Moore.*

Hypena, *Schrank.*—obductalis, narratalis, lacessalis, ignotalis, lacertalis, masurialis, læsalis, abducalis, *Walker:* indicalis, *Guénée:* ochreipennis, tortuosa divaricata, mediana, ophiusoides, incurvata, cidarioides, externa flexuosa, griseipennis, lativitta, modesta, triangularis, occatus, obsimilis, strigifascia, similata, umbripennis, *Moore.*

The genera Talapa, Corcobara, Apanda, Harita, Mathura, *Moore,* also belong to this family.

Family *Herminiidæ.*

Herminia, *Latreille*—robustalis, limbosalis, mistacalis, fractalis, *Guénée:* ochracealis, vialis, restricta, lineosa, duplexa, *Moore.*

Hydrillodes, *Guénée*—lentalis, *Guénée.*

Bértula, *Walker*—hisbonalis, *Walker:* brevivittalis, stigmatalis, vialis, placida, *Moore.*

Bocana, *Walker*—murinalis, renalis, picta, marginata, *Moore.*

The following genera also belong to this family :—Mastygophora, *Poey:* Echana, Locastra, Hipoepa, Lamura, Avitta, Aginna, Lamida, *Walker:* Madopa, *Steph.:* Zanclognatha, *Led.:* Rivula, *Guén.:* Cephena, Asthala, Pasira, Bibacta, *Moore.*

Tribe—Pyrales.

Family *Pyralidæ.*

Pyralis, *Linn.*—Mensalis, phycidalis, *Guénée:* pictalis, *Curtis:* lucillaris, suffusalis, *Walker.*

Agastya, *Moore*—hyblæoides, flavomaculata, *Moore.*

Glossina, *Guénée*—divitalis, *Guénée.*

Aglossa, *Latreille*—dimidialis, *Guénée.*

The genera Herculia, Stemmataphora, *Walker*, also belong to this family.

Family *Ennychiidæ.*

Pyrausta, *Schrank.*—absistalis, *Walker.*

The genera Rhodaria and Herbula, *Guénée*, also belong to this family.

Family *Asopidæ.*

Syngamia, *Guénée*—octavialis, *Walker.*

Agathodes, *Guénée*—ostentalis, *Geyer.*

Leucinodes, *Guénée*—sigulalis, melanopalis, *Guénée.*

The following genera also belong to this family :—Desmia, *Westwood:* Ædiodes, Samea, Salbia, Asopia, Megaphysa, Isopteryx, Terastia, *Guénée:* Daraba, *Walker:* Agrotera, *Schrank:* Chnaura, *Lederer.*

Family *Hydrocampidæ.*

Oligostigma, *Guénée*—gibbosalis, crassicornalis, *Guénée.*

Cataclysta, *Hübner*—peribocalis, *Walker:* magnificalis, *Hübner.*

Paraponyx, *Hübner*—affinialis, linealis, *Guénée.*

Hydrocampa, *Latreille*—picalis, depunctalis, *Guénée.*

Family *Spilomelidæ.*

Lepyrodes, *Guénée*—lepidalis, (Diasemia?) geometralis, *Walker.*

Phalangiodes, *Guénée*—neptalis, *Hübner.*

Zebronia, *Hübner*—plutusalis, aurolinealis, lactiferalis, *Walker.*

The genus Pycnarmon, *Lederer*, belongs to this family.

Family *Margarodidæ.*

Glyphodes, *Guénée*—stolalis, bivitralis, diurnalis, *Guénée:* actorionalis, cæsalis, univocalis, *Walker.*

Phakellara, *Guilding*—indica, *Saunders:* translucidalis, *Guénée.*

Margaronia, *Hübner*—conchylalis, vertumnalis, *Guénée:* psittacalis, *Hübner:* leodicealis, marthesiusalis, phryneusalis, *Walker.*

Pygospila, *Guénée*—tyresalis, costiferalis, *Guénée.*

Englyphis, *Hübner*—procopialis, *Hübner:* fulvidorsalis, *Geyer.*

Ilurgia, *Walker*—defamatalis, *Walker.*

The following genera of this family are also found in Bengal:—Maruca, *Walker:* Synclera, Cydalima, Pachyarches, Sisyrophora, *Lederer:* Heterodes, Filodes, *Guénée.*

Family *Botididæ.*

Astura, *Guénée*—obrinusalis, *Walker.*

Botyodes, *Guénée*—asialis, *Guénée.*

Botys, *Latreille*—pectinicornalis, sabelialis, multilinealis, sellalis, *Guénée:* caldusalis, scinisalis, tullalis, caldusalis, caletoralis, iopasalis, monesusalis, illisalis, rutilalis, Œmealis, amyntusalis, *Walker.*

Ebulea, *Guénée*—europsalis, *Walker.*

To this family also belong Scopula, *Schrank:* Godara, *Guénée:* and Dyssallacta, *Lederer.*

Tribe—Geometres.

Family *Urapterididæ.*

Urapteryx, *Leach*—podaliriata, *Guénée:* multistrigaria, *Walker:* margaritata, *Moore:* crocopterata, *Kollar.*

Chorodna, *Walker*—erebusaria, muricolaria, rectata, *Walker.*

Dalima, *Moore*—apicata, schistacearia, *Moore.*

Cimicodes, *Guénée*—castanearia, cruentaria, *Moore.*

Other genera are Euchera, *Hübner:* Chærodes, *Guénée:* Lagyra, Anzea, *Walker.*

Family *Ennomiidæ.*

Drepanodes, *Guénée*—circulitaria, *Walker:* argentilinea, *Moore.*

Hyperythra, *Guénée*—luteata, trilineata, *Moore.*

Eurymene, *Dup.*—inustaria, *Moore.*

Crocalis, *Treit.*—lentiginosaria, angularia, *Moore.*

The following Indian genera also belong to this family:—Luxiaria, Litbada, Erebomorpha, Lycimna, Decetia, Omiza, *Walker:* Caustoloma, *Lederer:* Angeroma, Panisala, Agnidra Garæus, *Moore:* Odontoptera, *Stephens:* Selenia, *Hübner:* Endropia, *Guénée:* Eunomos, *Treitschke.*

Family *Ænochromiidæ.*

Mergana, *Walker*—æquilinearia, restitutaria, *Walker.*

The genus Corotia, *Moore,* also belongs to this family.

Family *Amphidasididæ.*

The following genera belong to this family:—Amphidasys, *Guénée:* Bazura, *Walker.*

Family *Boarmiidæ.*

Hemerophila, *Stephens*—maurasia, creataria, *Guénée:* objectaria, *Walker:* basistrigaria, *Moore.*

Cleora, *Curtis*—venustularia, *Walker:* fimbriata, pannosaria, *Moore.*

Boarmia, *Treitschke*—alienaria, reparata, *Walker:* perspicuata, contiguata, *Moore.*

Tephrosia, *Boisduval*—scriptaria, mucidaria, *Walker:* dentilineata, *Moore.*

Hypochroma, *Guénée*—viridaria, varicoloraria, tenebrosaria, *Moore.*

The following genera also belong to this family:—Bargosa, *Walker:* Xandrames, *Moore:* Amblychia, Ophthalmodes, Elphos, *Guénée:* Gnophos, *Treitschke.*

Family *Geometridæ.*

Geometra, *Linn.*—avicularia *Guénée:* dentata, usta, *Walker:* alboviridis, *Moore.*

Thalassodes, *Guénée*—cælataria, dissimulata, dissita, *Walker:* sinuata, *Moore.*

The following genera also belong to this family :—Thalera, Comibæna, *Hübner:* Berta, *Walker:* Loxochila Nemoria, *Butler:* Agathia, *Guénée.*

Family *Palyadidæ.*

The genus Eumelea, *Duncan,* belongs to this family.

Family *Ephyriidæ.*

Anisodes, *Guénée*—pluristriaria, *Walker:* sanguinaria, diffusaria, *Moore.*

Family *Acidaliidæ.*

The following genera belong to this family and are found in Bengal :—Hyria, *Stephens:* Acidalia, *Treitschke:* Timandra, *Duponchel:* Drapetodes, Trygodes, Somatina, Argyris, *Guénée.*

Family *Microniidæ.*

Micronia, *Guénée*—fasciata, *Cramer:* gannata, *Guénée:* simpliciata, *Moore.*

The genera Myrteta, *Walker,* and Crosia, *Guénée,* also belong to this family.

Family *Caberiidæ.*

The genus Cabera, *Moore,* belongs to this family.

Family *Macariidæ.*

Macaria, *Curtis*—metagonaria, emersaria, permotaria, myandaria, *Walker:* eleonaria, *Cramer.*

Krananda, *Moore*—semihyalina, *Moore.*

Family *Fidoniidæ.*

Osicerda, *Walker*—alienata, *Walker:* trinotaria, *Moore.*

Sterrha, *Hübner*—sacraria, *Linn.*

The following genera also belong to this family :—Aspilotes, *Treitschke:* Zomia, *Moore:* Nobilia, Docirara, Marcala, Caprilia, *Walker.*

Family *Zereniidæ.*

The following genera belong to this family:—Rhyparia, *Hübner:* Percnia, *Guénée:* Nelcynda, *Walker:* Abraxas, *Leach:* Vindusara, *Moore.*

Family *Larentiidæ.*

Larentia, *Duponchel*—ærata, *Moore:* fissiferata, *Walker.*

Scotosia, *Stephens*—miniosata, atrostipata, dubiosata, *Walker:* obliquisignata, venimaculata, *Moore.*

Psyra, *Walker*—cuneata, *Walker:* similaria, *Moore.*

Cidaria, *Treitschke*—interplagata, *Guénée:* inextricata, *Walker:* signata, viridata, *Moore.*

The following genera also belong to this family:—Oporabia, *Stephens:* Eupithecia, *Curtis:* Sauris, Coremia, *Guénée:* Melanippe, *Duponchel:* Anticlea, *Stephens:* Arichauna, Gandarites, *Moore.*

Family *Euboliidæ.*

The genus Anaitis, *Duponchel,* belongs to this family.

Tribe—Crambices.

Family *Galleridæ.*

Propachys, *Walker*—nigrivena, *Walker:* linealis, *Moore.*

Apsarasa, *Moore*—radians, *Westwood.*

The genus Toccotosida, *Walker,* also belongs to this family.

Family *Crambidæ.*

Brihaspa, *Moore*—atrostigmella, *Moore.*

The following genera also belong to this family:—Ramila, *Moore:* Crambus, Apurima, Acara, Eschata, *Walker:* Schænobius, Scirpophaga, Calamotrepha, *Zeller.*

Tribe—Tortrices.

Family *Nycteolidæ.*

The following genera belong to this family:—Hylophila, *Hübner:* Tyana, Aphusia, *Walker.*

Family *Tortricidæ.*

Cerau, *Walker*—stipatana, onustana, *Walker.*

The genus Æmene, *Walker,* also belongs to this family.

Tribe—Tineines.

Family *Tineidæ.*

Adela, *Walker*—gemmella, griseella, *Walsing.*

To this family belongs the following genera :—Tinea, *Stainton :* Porsica, Alavona, Hapsifera, *Walker.*

Family *Hyponomentidæ.*

Hyponomeuta, *Zell.*—lapidellus, *Walsing.*

Psecadia, *Zell.*—ermineella, hockingella, *Walsing.*

To this family belongs the following genera:—Atteva, *Walker :* Anesychia, *Hübner :* Lampronia, *Zeller.*

Family *Plutellidæ.*

To this family belongs the genus Cerestoma, *Latreille.*

Family *Gelechidæ.*

To this family belong the following genera :—Depressaria, *Haw.;* Binsitta, *Walker:* Parasia, *Duponchel:* Anarsia, Gelechia, Æcophora, *Zeller:* Butalis, *Treit.*

Family *Gracillaridæ.*

To this family belong the following genera :—Gracillaria, Coriscium, Ornix, *Zeller.*

Family *Elachistidæ.*

To this family belong the following genera :—Cosmopterix, *Hübner:* Atkinsonia, Lozostoma, *Stainton.*

Family *Lithocolletidæ.*

The genus Lithocolletis, *Zeller,* belongs to this family.

Family *Lyonetidæ.*

The genus Phyllocnistis, *Zeller,* belongs to this family.

HYMENOPTERA.

The order Hymenoptera (membrane joined-winged) comprises the insects commonly known as ants, bees, wasps, saw-flies and ichneumons, and is distinguished by the posterior wings being furnished with hooks by which they are joined on to the posterior margin of the fore-wings and thus become united for the purpose of flight. The Hymenoptera undergo a complete metamorphosis. The body is composed

Hymenoptera.

of the usual three parts, head, thorax and abdomen. The head is furnished with a mouth, eyes and antennæ. The mouth is formed for mastication or prehension, except in the bees, in which a suctorial apparatus is developed. The mouth is furnished with mandibles, maxillæ and an upper and under lip and four palpi or feelers, two maxillary and two labial. The under jaws and under lip are generally long and narrow, fixed deep in the cavity of the head by lengthened muscles, somewhat tubular at their lower portion and often folded at their extremity and serving rather for the transmission of nutritive juices than for mastication properly so-called. The true eyes are compound, but in addition all are provided with three simple eyes or ocelli. The antennæ are usually thread-like or hair-like, but vary in form in the different families, and often in the individuals of different sexes in the same species. There are four membranous wings of homogeneous texture, and usually veined instead of reticulated. The posterior pair are usually smaller than the anterior pair, and all are, as a rule, transparent, though some species possess clouded or spotted wings. The thorax is divided into three segments, to which are attached the legs. The first segment is very short, and the two others are closely united. In one division the trochanters of the legs are attached to the femora by a single articulation, and in the other division by two joints. The tarsi or feet are five-jointed. The abdomen consists of 5-9 segments attached to the thorax either by its entire breadth (sessile) or by a slender stalk (pedicled). The female is furnished with an appendage called an ovipositor or egg-placer, which in some species, provided with a poison sac and gland, can be converted into a weapon of offence or defence. The larvæ of the Hymenoptera resemble little worms: where the food is around them they are white, fat, legless grubs; but where, like the larvæ of butterflies, they have to feed on leaves and the like, they develop thoracic or true legs and a number of false or abdominal legs adapted to their mode of life. Most of the larvæ enclose themselves in a cocoon before they undergo the change into the pupa state. The apodal larvæ feed on insects provided for them by their mother, who either carries the food to her young or lays her eggs in the larvæ of some other species that supplies in its living body sufficient nourishment for her young. Amongst bees, the neuters act as nurses to the helpless young, and are careful,

accurate and patient attendants. The perfect insects of the order live, for the most part, on vegetable substances.

Classification.

The insects of this order are distributed into two great divisions: (1) *Aculeata*, in which the trochanter is attached to the femur by a single joint and the ovipositor is provided with a poison gland; (2) *Terebrantia* (*Ditrocha*) in which the trochanter is attached to the femur by a double articulation and the ovipositor is not used as a weapon of defence. This latter division is susceptible of a further separation into *Securifera* and *Spiculifera*, explained below. The distribution of the families will then be as follows :—

I.—ACULEATA.

a. *Heterogyna*—social and solitary ants.

b. *Fossores*—sand-wasps.

c. *Diploptera*—true wasps.

d. *Anthophila*—bees.

II.—TEREBRANTIA.

A. SECURIFERA, in which the abdomen is joined to the thorax by its entire width and the larvæ have legs and live on vegetable juices and the ovipositor forms either a short-saw or exserted borer.

a. *Tenthredinidæ*—saw-flies.

b. *Siricidæ*—borers.

B. SPICULIFERA, in which the abdomen is joined to the thorax by a stalk, the larvæ are legless and live on animal food (except some gall-insects).

a. *Cynipidæ*—gall-flies.

b. *Chalcididæ*—chiefly parasites on insects.

c. *Proctotrypidæ*—chiefly parasites.

d. *Evanidæ*—parasites on cockroaches.

e. *Braconidæ*—parasites on insects.

f. *Ichneumonidæ*—parasites on insects.

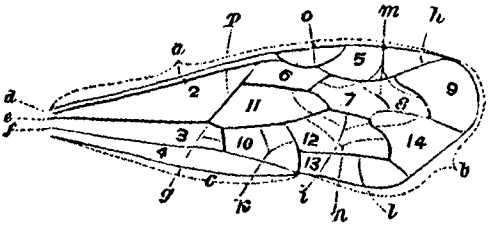
The number of known species has been estimated at 17,000, but the actual number in existence must be four times as great.

Neuration of the wings.

The structure of the wings and the nature and number of the nervures and of the cells or intermediate spaces and their ramifications has served as the basis of classification in the system of Jurine and may be briefly noticed. The wings have few nervures, and when they are present they proceed from the base or the costa towards the apex which they may or may not reach. The marginal and sub-marginal nervures are the more important and the discoidal and lanceolate cells. As observed by a writer on this subject, the arrangement of the nervures, though showing great diversity in form, is, within certain limits, remarkably constant. Their use in classification does not lead to the formation of artificial groups, for we find that the existence of a particular arrangement of the nervures in a hymenopterous insect denotes the presence of other characters. The neuration differs, however, in every family and even in the genera of the same family, and the terminology in general use may be gathered from the explanations attached to the following figures :—

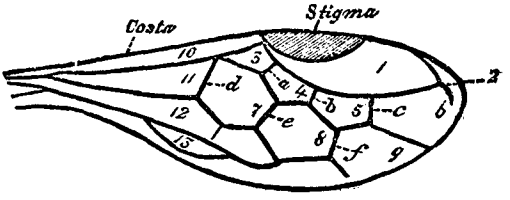
FIG. A.

Explanation—Wing 1, marginal cells: 2, appendicular cell: 3 to 6, sub-marginal cells: 7 to 9, discoidal cells: 10, costal cell: 11, 12, humeral cells, and 13, lanceolate cell: *a*, *b*. *c*, sub-marginal nervures: *d*, basal nervure: *e*, *f*, recurrent nervures.



Explanation—*a*, costal (radial) nervure: *b*, apical margin: *c*, posterior margin: *d*, post-costal (cubital) nervure: *e*, externo-medial (brachial) nervure: *f*, anal (brachial) nervure: *g*, transverso-medial nervure: *h*, radial nervure: *i*, cubital nervures: *j*, *k*, discoidal nervure: *l*, subdiscoidal nervure: *m*, sub-marginal nervures: *n*, recurrent nervures: *o*, stigma, and *p*, basal nervures: 1, costal cell: 2 to 4, humeral (branchial) cells, external, intermediate and internal: 5, marginal (radial) cell: 6 to 9, first to fourth sub-marginal (cubital) cells: 11, 12, 14 discoidal cells, internal, intermediate and external: 10, 13, posterior cells, internal and external.

FIG. B.



Explanation—1, marginal; 2, appendicular; 3 to 6, sub-marginal; 7 to 9, discoïdal; 10, costal; 11, 12, branchial, and 13, lanceolate cellusces. *a, b, c*, sub-marginal nervures; *d*, basal nervure; *e, f*, recurrent nervures (Enc. Brit.)

The numerous species of ants existing in India will well repay examination. The common black ant (*F. compressa*, Fabr.) of our gardens, with its numerous society and its army of wingless neuters, can be observed in almost every town. The red ant (*F. smaragdina*, Fabr.) of the mango groves is also easily found. It makes its nest far up in the branches from the living leaves by drawing them together and attaching them to each other by a fine web which is spun from the mouth of the workers. The red ants are the most fierce and quarrelsome of the whole tribe, and attack not only the black ants but also foreign colonies of their own species. In some parts they are used to get rid of colonies of wasps, and for this purpose a branch of the mango tree bearing a red ant's nest is carefully cut down and carried to the neighbourhood of the wasps' nest. The latter seem to be at once aware of their danger and fight desperately, but in the end they fall an easy prey to the red ant, who, not satisfied with its victory, attacks in its blind rage every living thing that approaches it, and in some species its bite is very severe. The bodies of the winged females of this species are of a fine apple-green colour. A minute brown species is often found near the foot of a *pípal* or *nim* tree where white ants have made their galleries, and if this protection be removed, the small ants soon enter in myriads and bring back between every two or three, a fat, struggling white ant, and if the operation be repeated often enough, the latter will cease to infest that particular tree. A rufous species (*F. longipes*, Jerd.) occupies holes in the ground in jungly tracts and frequently announces its presence to those who incautiously sit down near its haunts by inflicting a sharp stinging bite. Another species affecting similar localities is that happily named *F. processionalis*.

by Jerdon. It is sometimes to be seen forming dense columns many yards long in full march from one part of a forest to another. Dead beetles, drowned flies and other insects are all carried off by ants who sometimes make sad havoc, in a single night, in a collection of insects not properly protected. Close to the true ants come the *Dorylidæ*, of which one species makes its nest in the floor or walls of houses and lives in societies, swarming at certain seasons. In the genus *Myrmica*, the ant is provided with a sting with which it can produce a troublesome swelling. The family *Mutillidæ*, which is joined by most authors to the *Formicidæ*, contains certain small brightly coloured solitary insects of which the females resemble the neuters of ants in being wingless. So far as is hitherto known they are found only as parasites on humble-bees.

The tribe *Fossores*, or diggers, comprise species resembling the ants as well as others having the appearance of true wasps and some peculiar to the tribe. They are carnivorous in their habits and excavate celled chambers in the ground and even in wood or walls in which to store up food for their larvæ. The food consists of insects benumbed by the poison of their sting, and in this state of lethargy capable of living for months and furnishing the young *fossor* with its natural food, the living tissue of other insects. The sand-wasps, mason-wasps, and house-wasps belong to the same tribe. The true wasps are distinguished from the *Fossores* by having their wings disposed longitudinally when in repose, while the eyes are reniform and reach to, or near to the base of the mandibles. Some are social in their habits and all are carnivorous. The false wasps (*Odynerus*) belong to this section as well as *Eumenes*. Amongst the true wasps (*Vespidæ*) there are males, females and neuters or workers living in societies more or less permanent. Many of them construct their nests of papyraceous substances, and it is in one species of this tribe that Siebold discovered that the males originated by parthenogenesis from infecundated eggs. To the bees belong the humble-bee, carpenter-bee, mason-bee and the honey-bee, all of which live on vegetable substances. *Chalicodoma semivestita* builds exactly the same sort of ovate mud nest on walls as its European representative, and several species of *Megachile* have the same leaf-cutting habits as elsewhere. Of the carpenter-bee (*Xylocopa*) there are many examples, and three species known collectively as *bhaunra*

are common in the Kumaon forests, where they do much damage to timber. The larger of the three attacks the wood-work of buildings and the dead-wood of felled timber; whilst the brown species lives in colonies and bores into living trees where it constructs its six-celled abode. The third species is the smallest, but is also the most numerous and lives in societies and specially selects the *haldu* (*Adina cordifolia*) as its home. The *bhaonra* when enraged is, as noted by Moorcroft, a very formidable antagonist, and occasionally causes much suffering to men and cattle from its sting. The species of honey-bee are not numerous and the workers differ from each other very little in appearance. It is only when the two sexes and their workers are compared that specific distinctions can be well established. *A. dorsata* (Fabr.) suspends its comb from the branches of trees without any outward protection, and is one of the more common Indian species, but variable in appearance. In some places the male is reddish yellow with the upper portion of the thorax, the scape of the antennæ and the outside of the posterior tibiæ and metatarsus black. In the workers the abdomen is yellow with the apex more or less dusky or only with the two basal segments yellowish red. *A. indica* (Fabr.) is, however, the more common and is somewhat smaller than the honey-bee of Europe. It is kept by the villagers in Kumaon in a hive made out of a log of wood and let into the wall of the owner's dwelling. The inner side is closed by a sliding door and the outer has a small opening to permit the entrance and exit of the bees. The bees are driven out by knocking on the inner side of the hive, and after they have flown the outer hole is stopped and the honey is removed, after which the bees are allowed to return. The honey of the Sor valley collected in this way is in high repute for its richness due to the groves of *Bassia butyracea*, on the flowers of which the bees feed. In many places the honey produced by wild bees is equally good, but in others it produces a sort of intoxication very distressing whilst it lasts. The Bhábar honey is therefore not much sought after unless collected by experienced and trustworthy hands.

The *Tenthredinidæ* or saw-flies and *Siricidæ* or borers are very numerous in species and individuals. The former are provided with a double saw with which the female pierces the leaves or bark of plants to secure a place for her eggs. The larvæ resemble those

of the Lepidoptera, the chief difference being that they have six or more pair of membranous legs, whilst the larvæ of the butterfly have never more than five. One species frequently attacks the pine and destroys it by removing the leaves: another infests the rose and another the imported fruit-trees. The long ovipositor of the *Sirex* enables it to pierce deep down in the bark of the Coniferæ in order to lay its eggs and provide a suitable place for its larvæ.

The *Chrysididæ* are small-bodied flies with a shining metallic lustre found as parasites on bees and wasps. The *Cynipidæ* or gall-insects are those that cause galls on the leaves and branches of plants to serve as food and lodgings for its young. An instance may be seen on any of the poplar trees about Naini Tál and on breaking open the gall, the fat, legless grubs will be found in all stages of growth surrounded by a cottony white substance, the use of which is not known. The *Chalcididæ* comprise an immense number of minute insects having brilliant metallic bodies of a green lustre and which are found as parasites on other insects or on corn. The *Proctotrypidæ* are usually of a brown or red colour and are also parasites. The *Evanidæ* are parasites on cockroaches, and the *Ichneumonidæ* and *Braconidæ* are found as parasites on all orders of insects.

HYMENOPTERA—Ants, bees, wasps.

1. ACULEATA.

Tribe—Heterogyna.

Family *Formicidæ*.

Formica, *Linn.*—crinita (N. I.) *Smith*: compressa (In.), cinerascens (Mad.), cylindrica, elongata (Mad.), conica (Mad.), ruficornis, gigas, abdominalis (N. I.), carbonaria, *Fabr.*: assimilis (Mad.), nana (Mys.), rufoglauea (Mad.), phyllophila (Mad.), stricta (Mal.), timida (Mal.), vagans (Mal.), velox (Mal.), longipes (Tell.) *Jerdon*: ardens (Dec.), impetuosa (Bom.), callida (Dec.), lutea (N. I.), gibbosa (In.), *Smith*: prismatica, sericea, quadrilatera (Mad.), *Mayr*.

Polyrhachis, *Smith.*—bihamatus, *Drury:* lacteipennis (N. I.), *Smith:* hastatus (In.), sexspinosus (In.), relucens (Mad.), rastellatus, *Latr.:* nidificans (Mal.), sylvicola (In.), *Jerdon.*

Œcophylla, *Smith*—smaragdina (N. I.), *Fabr.*

Family *Odontomachidæ, Mayr.*

Drepanagnathus, *Smith*—saltator (Mad.), *Jerdon.*

Family *Ponerida.*

Ponera, *Latr.*—sculpta (Mal.), stenocheilos (Mal.), processionalis (In.), affinis (Mal.), pumila (Mal.), *Jerdon:* scalprata (N. I.), iridipennis (N. I.), *Smith.*

Family *Myrmicidæ.*

Myrmica, *Latr.*—vastator, humilis (Bom.), bidentata (Cal.), rugifrons, *Smith:* diffusa (In.), cæca (Mys.), tarda (Mal.), fodiens (Mal.) *Jerdon:* molesta, *Say.*

Myrmecina, *Curtis*—pilicornis (Bom.), *Smith.*

Myrmicaria, *Saund.*—brunnea, *Saund.:* crinita (Mad.), *Smith.*

Pseudomyrma, *Guér.*—minuta (Mad.), rufipes (Salem), rufonigra (Mad.) nigra (Mad.), *Jerdon:* atrata (Bom.), læviceps, *Smith.*

Crematogaster, *Lund.*—Kirbii (Mys.), *Sykes.*

Atta, *St Farg.*—destructor (In.), domicola (Mad., Nellore), rufa (Mal.), dissimilis (Mal.), floricola (Mad., Telli.), *Jerdon:* instabilis (N. I.), *Smith.*

Pheidole, *West.*—providens (Poona), *Sykes:* malabarica (Mal.), diffusa (In.), diversa (Mys.), minor (Mad.), affinis (Mal.), quadrispinosa (Mal.), *Jerdon.*

Family *Cryptoceridæ.*

Meranoplus, *Smith.*—bicolor (Mad., Cal.), *Guér.*

Cataulacus, *Smith.*—granulatus, *Latr.*

Family *Dorylidæ.*

Dorylus, *Latr.*—labiatus (Dec., As.), longicornis (Ben.), *Shuck.:* orientalis (Ben.), *West.:* hindostanus (Panj.), *Smith.*

Ænictus, *Shuck.*—ambiguus (Puna), *Shuck.:* pubescens (N. I.), *Smith:* certus, *West.*

Family *Thynnidæ.*

Iswara, *West.*—lutea, *West.:* fasciata (Sind), *Smith.*

Family *Mutillidæ.*

Methoca, *Latr.*—orientalis (N. I.), *Smith.*

Mutilla, *Linn.*—indica, *Linn.:* glabrata, nigripes, *Fabr.:* rugosa, *Oliv.:* 6-maculata, *Swed.:* bengalensis, analis, rufogastra (Nep.), dimidiata, *St. Farg.:* antennata, argentipes, aurifrons, blanda, dives, diversa, indostana (Mad.), Miranda, nobilis (Mad.), optima, opulenta, pulchrina (Mad.), repræsentans, reticulata, rufiventris, semiaurata, aulica (N. I.), pusilla (N. I.), funeraria (N. I.), unifasciata (N. I.), regia, *Smith:* indica, *Linn.*

Apterogyna, *Latr.*—mutilloides, *Smith.*

Tribe—Fossores.

Family *Scoliadæ.*

Myzine, *Latr.*—dimidiata (Ben.), *Guér.:* anthracina, petiolata, Madraspatana, fuscipennis, *Smith.*

Tiphia, *Fabr.*—hirsuta (N. I.), rufipes (N. I.), rufo-femorata (N. I.), *Smith.*

Scolia, *Fabr.*—4-pustulata (Mad.), rubiginosa *Fabr.:* cærulans, *St. Farg.:* apicicornis, apicalis, *Guér.:* patricialis, *Burm.:* Iris, *Klug:* erratica, instabilis, pulchra, specifica, vivida (Mad.), venusta, personata (As.), ignita (As.), nudata, fervida (Bom.), *Smith:* insignis, *Saup.:* bilunata, (Nep.), splendida, nobilis, stizus (Mad.), *Sauss.*

Elis, *Fabr.*—litigiosa rubromaculata, eximia, habrocoma, luctuosa, (As.), *Smith;* aureicollis, parvula, *St. Farg.:* marginella, *Klug:* thoracica, annulata quadrifasciata grossa, *Fabr.:* asiatica, hirsuta, *Sauss.*

Family *Pompilidæ.*

Pompilius, *Fabr.*—analis, fulvipennis, *Fabr.:* comptus, dorsalis, *St. Farg.:* fenestratus (Ben.), honestus, Madraspatanus, pedunculatus, unifasciatus, cæruleus (N. I.), *Smith.*

Priocnemis, *Schiödte*—luscus (Mad.), *Fabr:* peregrinus (Cal.), *Smith.*

Agenia, *Schiödte*—blanda, (Ben.), *Guér.:* tincta, cærulea, festinata, *Smith.*

Pepsis, *Fabr.*—Dyoclene, *Smith.*

Ferreola, *St Farg.*—fenestrata (Mad.), *Smith.*

Macromeris, *St. Farg.*—splendida, violacea (As.), *St. Farg.*

Mygnimia, *Shuck.*—flava, *Drury :* flavicornis (Mad.), *Fabr.:* severa, *Drury:* audax (As.), fenestrata (As.), perplexa (Mad.), bellicosa (Ben.), sævissima (Bom.), intermedia (N. I.), Atropos, *Smith.*

Ceropales, *Latr.*—flavo-picta, fuscipennis, ornata, *Smith.*

Family *Sphegidæ.*

Ammophila, *Kirby.*—erythrocephala (Panj.), *Fabr.:* basalis (Panj.), nigripes (Mad.), lævigata (Mad., Bom.), dimidiata (In.), elegans (Panj.), atripes (Bom.), punctata (N. I.), vagabunda (N. I.), *Smith:* Smithii, *Baly.*

Pelopæus, *Latr.*—madraspatanus (In.), *Fabr.:* Solieri, Spinolæ (Bom.), coromandelicus, *St. Farg.:* bengalensis, *Dahl.:* bilineatus (Bom.), pictus, seperatus (Bom.), *Smith.*

Chlorion, *Latr.*—lobatum, splendidum (N. I.), *Fabr.:* melasoma (Mad.), regale (Sind), *Smith:* æneum (Mad.), *Spin.*

Sphex, *Fabr.*—argentata (M.), Fabricii (Mad.), *Dahl.:* ferruginea, vicina, *St. Farg.:* flavo-vestita, *Smith.*

Harpactopus, *Smith*—crudelis (Mad.), nivosus (N. I.), *Smith.*

Parasphex, *Smith*—fervens (Mad. Bom.), *Fabr.*

Ampulex, *Jurine*—compressa (Mal.), *Fabr.*

Trirogma, *West*—cærulea (Mad., N. I.), *West.*

Family *Larridæ*.

Larrada, *Leach.*—aurulenta (Mad.), maura (Mad.), *Fabr.*: similima, conspicua, argyrea (N. I.), subtessellata, exilipes (N. I.), jaculator (N. I.), vestita (N. I.), *Smith.*

Tachytes, *Panz.*—nitidulus (Mad., Panj.), repandus, *Fabr.*: tarsatus, fervidus, monetarius (Panj.), modestus, *Smith.*

Astata, *Latr.*—orientalis, agilis, *Smith.*

Pison, *Spin.*—rugosus, *Smith.*

Family *Bembicidæ*.

Bembex, *Fabr.*—olivacea (Mad.), lunata (Mad.), *Fabr.*: trepanda, sulphurescens (Mad., Panj.), *Dahl.*

Family *Nyssonidæ*.

Larra, *Klug.*—fasciata (Mad.), vespiformis (Mad., Panj.), *Fabr.*: Delessertii (Mad.), *Guér.*: blandina, melanoxantha, mellea, nubilipennis, rufescens (Panj.), cornuta (Bom.), *Smith.*

Nysson, *Latr.*—basalis, *Smith.*

Gorytes, *Latr.*—pictus (Mad.), amatorius, tricolor, *Smith.*

Harpactus, *Shuck.*—ornatus (N. I.), *Smith.*

Family *Crabronidæ*.

Trypoxylon, *Latr.*—pileatum (Mad.), accumulator, *Smith.*

Oxybelus, *Latr.*—agilis, tridentatus, ruficornis, sabulosus, squamosus, *Smith.*

Crabro, *Fabr.*—fuscipennis, argentatus, *St. Farg.*: flavo-pictus (N. I.), insignis, *Smith.*

Family *Cerceridæ*.

Cerceris, *Latr.*—interstincta (Mal.) *Fabr.*: flavo-picta (N. I.), hilaris (N. I.), instabilis, mastogaster (Mad.), orientalis (Mad.), vigilans (Mad.), fervens (N. I.), albopicta (Bom.), viscosus, rufinodis, velox, *Smith*: bifasciatus, *Guér.*

Philanthus, *Fabr.*—pulcherrimus, sulphureus (N. I.), depredator, elegans (N. I.), *Smith.*

Tribe—Diploptera.

Family *Eumenidæ.*

Eumenes, *Latr.*—circinalis, conica, esuriens, *Fabr.:* flavopicta, *Blanch.:* affinissima, xanthura, Edwardsii (Bom.), Blanchardii (Mad), exigua, indiana, brevirostrata, depressa, quadrispinosa, *Sauss.*

Montezumia, *Sauss.*—indica, *Saussure.*

Rhynchium, *Sauss.*—nitidulum, hæmorrhoidale, brunneum (Ben.), carnaticum (Ben., Mad.), argentatum, *Fabr.:* bengalense, atrum, metallicum (Mad.), Mellyi, dichotomum, *Sauss.*

Odynerus, *Latr.*—Sichelii, punctus, punctatipennis, ovalis, diffinis, *Sauss.:* intricatus (Ben.), guttatus, *Smith.*

Family *Vespidæ.*

Belonogaster, *Sauss.*—indicus, *Sauss.*

Icaria, *Sauss.*—marginata (Mad.), *St. Farg.:* aristocratica, formosa, artifex, picta, *Sauss.:* ferruginea (Mad.), *Fabr.:* pendula (Bareilly), variegata (Puna), *Smith.*

Polistes, *Latr.*—hebræus, stigma, *Fabr.:* orientalis, *Kirby:* confusus, *Smith:* hoplites, sagittarius, *Sauss.*

Vespa, *Linn.*—orientalis, *Linn.:* cincta (Mad.), affinis, analis, bicolor, *Fabr.:* velutina, *St. Farg.:* auraria (N. I.), obliterata (N. I.), magnifica (Mus.), basalis, (Nep.), crabroniformis, ducalis, *Smith:* doryloides, *Sauss.*

Tribe—Anthophila.

Family *Andrenidæ.*

Prosopis, *Fabr.*—mixta, *Smith.*

Sphecodes, *Latr.*—fuscipennis (N. I.), apicatus, *Smith.*

Nomia, *Latr.*—crassipes (Mad.), curvipes (Mad.), strigata, *Fabr.:* basalis, iridescens, Elliottii, (Cal., Mad.), oxybeloides (Him.), silhetica, capitata (N. I.), clypeata, fervida (Dec.), combusta (Bom.), pilipes (N. I.), Buddha, sykesiana (Dec.), *West.:* aurifrons (As.), simillima (Cal.), scutellata (Cal.), thoracica (Cal.), antennata (Bom., Oudh), *Smith.*

Halictus, *Latr.*—propinquus (N. I.), agrestis (N. I.), albescens (N. I.), rugolatus (N. I.), constrictus (N. I.), lucidipennis (N. I.), xanthognathus (N. I.), fimbriatus (N. I.), *Smith.*

Cyathocera, *Smith*—nodicornis (Cal.), *Smith.*

Andrena, *Fabr.*—exagens, *Smith.*

Family *Apidæ.*

Lithurgus, *Latr.*—atratus, *Smith.*

Chalicodoma, *St. Farg.*—semivestita, *Smith.*

Megachile, *Latr.*—disjuncta lanata, *Fabr.:* dimidiata, anthracina, vestita, conjuncta (Ben.), umbripennis (Nep.), fulvo-vestita (Bom.), rufipes, imitatrix, rufiventris, fraterna, monticola, (As.), carbonaria (N. I.), cephalotes (N. I.), albifrons (N. I.), velutina (N. I.), bicolor, fasciculata, *Smith.*

Crocisa, *Jurine*—Histrio, *Fabr.*

Ceratina, *Latr.*—simillima, hieroglyphica (N. I.), *Smith:* viridis, *Guér.*

Allodape, *St. Farg,*—marginata, *Smith.*

Nomada, *Fabr.*—solitaria (N. I.), decorata (N. I.), adusta, *Smith:* bipunctata, *Fabr.*

Cælioxys, *Latr.*—ducalis, apicata (N. I.), capitata (N. I.), argentifrons, basalis, cuneatus, confusus, *Smith.*

Stelis, *Panz.*—carbonaria (N. I.), *Smith.*

Tetralonia, *Spin.*—Duvaucelii (Ben.), *St. Farg.:* floralia, elegans, *Smith.*

Anthophora, *Latr.*—zonata, *Linn:* fasciata, bicincta, *Fabr.:* violacea, sub-cærulea, *St. Farg.:* confusa, niveocincta, *Smith.*

Xylocopa, *Latr.*—ruficornis, fenestrata (Ben.), cærulea, *Fabr.:* æstuans, *Linn.:* latipes, *Drury:* verticalis, iridipennis, viridipennis, ferruginea (Ben.), dissimilis (Mad.), collaris (Ben.), Olivieri, orichalcea, (Ben.), auripennis, (Ben.), *St. Farg.:* lunata (Mad.), indica (Mad.), *Klug:* tenuiscapa (Mad., As.), *West.:* flavo-nigrescens (As.), basalis (N. I.), acutipennis (As.), provida, rufescens, ignita (Bom.), *Smith.*

Bombus, *Latr.*—tunicatus (N. I.), rufo-fasciatus (N. I.), hæmorrhoidalis (N.I.), funerarius (N. I.), similis (N.I.), orientalis, formosus, eximius (As.), *Smith.*

Trigona, *Jurine*—vidua, *St. Farg.*

Apis. *Linn.*—indica [=Delessertii (Mad.), *Guér.*: Perrotettii *Guer.*: Peronii, socialis (Ben.), *Latr.*] (In.); dorsalis [=zonata, *Guér.*: bicolor, *Klug*: nigripennis, *Latr.*], florea [=lobata and reniformis, *Smith*, and indica, *Latr.*], *Fabr.*

Tribe—II.—DITROCHA.

A.—Securifera.

Family *Tenthredinidæ.*

Lophyrus, *Fabr.*—pini (N.-W. P.), *Linn.*

Hylotoma, *Latr.*—albocincta (Nep.), xanthogaster (Nep.), lutea (N. I.), bipunctata, interstitialis (Darj.), simlaensis (Panj.), *Cameron*: janthina (Nep.), *Klug.*

Athalia, *Leach.*—spinarum, *Fabr.*: tibialis, *Cameron.*

Monophadnus, *Smith*—cærulescens (Nep.), bengalensis (Ben.), *Cameron.*

Allantus *Smith.*—trochanteratus (N. I.), *Cam.*

Pachyprotasis, *Hartig.*—versicolor (N. I.), rapæ, albicincta (Him.), *Cam.*

Macrophya, *Klug*—rotundiventris (N. I.), *Cam.*

Tenthredo, *S. Str.*—metallica (N. I.), clypeata (N. I.), xantheptera (Nep.), indica (N. I.), latifasciata, simulans, *Cameron.*

Dolerus, *Smith*—rufocinctus, *Cameron.*

Family *Siricidæ.*

Tremex, *West.*—smithii (N. I.), *Cameron.*

Sirex, *Fabr.*—xanthus (N. I.), *Cameron.*

B.—Spiculifera.

Family *Chalcididæ.*

Leucospis, *Fabr.*—atra (Mad.), *Fabr.*

Chalcis, *Fabr.*—Amphissa (Nep.), *Walk.*

Schizaspidia, *West.*—furcifer (Ben.), *West.*

Family *Chrysididæ.*

Stilbium, *Spin.*—splendidum, *Fabr.*

Hedychrum, *Latr.*—timidum, *Dahl.*: rugosum, *Smith.*

Parnopes, *Latr.*—viridis (Mad.), *St. Farg.*

Pyria, *St. Farg.*—oculata, *Fabr.*

Chrysis, *Fabr.*—oculata, amethystina, *Fabr.*: pubescens (Bom.), *Smith*: dissimilis, Rechei, orientalis exulans, Schiödtei, *Dahl.*: fuscipennis, *Brullé.*

Family *Evaniadæ.*

Megischus, *Br.*—coronator, *Fabr.*

Stephanus, *Jur.*—indicus (Mad.), *West.*

Evania, *Fabr.*—lævigata, *Latr.*: antennatis, *West.*

Family *Ichneumonidæ.*

Pimpla, *Fabr.*—bipartita, *Br.*: punctata, pedator, *Fabr.*

Ophion, *Fabr.*—univittatus, rufus (In.), *Br.*

Paniscus, *Grav.*—lineatus (Ben.), *Br.*

Cryptus, *Fabr.*—tricolor (Ben.), *Br.*

Joppa, *Fabr.*—rufa, *Brullé.*

Mesostenus, *Grav.*—marginatus (Ben.), geniculatus, ochropus, *Br.*

Hemiteles, *Grav.*—tripartitus (Mad), *Br.*

Family *Braconidæ.*

Bracon, *Fabr.*—aculeator, femorator, *Fabr.*: laminator, Richei, didymus, *Br.*: hindostanus, Brullei, *Smith.*

Vipio, *Latr.*—scutus, bicarinatus, *Br.*

Agathis, *Latr.*—flavipennis, maculipennis (Ben.), semifusca, suffasciata, *Br.*

References.

St. Fargeau et Brullé.—Histoire Naturelle des Insectes Hyménoptères. (IV. Vol. by Brullé). Paris, 1836-46.

Westwood.—Mod. Class, Ins., II. 1839: Arc. Ent., I. 43, (Dorylidæ). II. 66 (Sphegidæ.) also Australian species of Mutillidæ and Thynnidæ. An. Mag. N. H. *n. s.* II. 393: VI. 87: VII. 536.

Walker, F.—List of the specimens of Hymenopterous insects in the British Museum (Chalcidites, Pts. I., II.) 1846-8: Descriptions of new Chalcidites. An. Mag. N. H. from 1838 *passim.*

Smith, F.—Catalogue of Hymenopterous insects in the British Museum, Pt. I. (Andrenidæ and Apidæ), 1853: Pt. II. (Apidæ), 1854: Pt. III. (Mutillidæ), 1855: Pt IV. (Sphegidæ, Larridæ, Crabronidæ), 1856: Pt. V. (Vespidæ), 1857: Pt. VI. (Formicidæ), 1858: Pt. VII. (Dorylidæ, Thynnidæ), 1859: An Mag. N. H. 3rd Ser. XV. 376, and Packard, *Ibid*, XVIII. 82: J. Linn, Soc., XI. 285. Tr. Ent. Soc, 1875, pp. 33, 297.

Gerstæcker.—Varietie of the honey-bee, An. Mag. N. H. 3rd Ser. XI. 270, 333.

de Saussure.—Monographie des Guepes solitaires. Paris 1852: des Guepes sociales, 1853.

Jerdon.—Catalogue of the species of ants found in Southern India. Madras Journ. Lit. and Sc., 1851: An. Mag. N. H. 2nd Ser. XIII., 45-100.

Wood-Mason.—List of Burmese Hymenoptera, J. A. S. Ben. XLVII. ii. 167.

Cameron—Trans. Ent. Soc. 1876, p. 459: 1877, p. 57, 87: 1879, p. 107, and *Saunders, Ibid.* (British), 1880, p. 201.

DIPTERA.

Diptera.

The order Diptera (two-winged) includes those insects commonly known as house-flies, crane-flies, gad-flies, bot-flies, gnats, and mosquitos. The insect passes through the three stages of larva, pupa and imago. The body is composed of three parts, the head, thorax and abdomen. The plane of the head opposite the thorax is called the occiput, and that portion of it lying over the junction of the head, the nape (*cervix*). The part of the head between the antennæ and the occiput is known as the front (*frons*) and the top of it the crown (*vertex*), the boundary between the front and the occiput being called the vertical margin. The middle of the front being often of a more membranaceous nature and sometimes differing in colour from its borders is called the frontal stripe. The frontal crescent is separated from the front by an arcuated impressed line called the frontal fissure. The anterior part of the head from the antennæ to the mouth is called the face (*facies*). The head is furnished with a mouth, eyes and antennæ. The oral parts destined for sucking consist of 2-6 hair-like pieces of a scaly texture, and are either enclosed in the upper groove of a sheath having the form of a proboscis and terminated by two lips or are covered by one or two unjointed scales that form the sheath. The oval parts in Diptera are analogous to and represent the jaws, lips and feelers of the mouths of other insects. The more noticeable of these parts are the *labium* or under lip and the palpi or feelers. The eyes are compound and are surrounded, as a rule, by a ring called the orbit. Where simple eyes

exist, they are never more than three in number and are placed on the vertex, sometimes in a sharply-defined triangular space called the ocellar triangle. The antenuæ are placed on the front part of the head: the two lower joints are called the *scapus* and the remainder the *flagellum*. They vary much in form and size in different families. The thorax consists of three parts, though in appearance there is only one. The first and last segments are very short. The mesothorax bears the wings on its upper surface and these are two in number, membraneous, veined and mostly transparent, though occasionally spotted. They lie, when at rest, longitudinally to the body and have a pair of alulets at their base. A pair of balancers (*halteres*) are attached to the last segment of the thorax and represent rudimentary hind-wings. The abdomen consists of 5-9 apparent segments and is frequently joined to the thorax by only a portion of its breadth. In the females the abdomen usually terminates in a point, but in those with fewer segments it terminates in a succession of small tubes which close up in the manner of a telescope. There are six legs terminating in 5-jointed tarsi, of which the last joint is furnished with two claws and two or three *pulvilli* or cushions that enable the insect to walk on polished surfaces. The greater number of the Diptera possess a bladder-like expansion (*ingluvies*) or crop communicating with the æsophagus by a tube. The larvæ are fat, white, legless grubs brought up in the food provided for them from the time of their exit from the egg. They do not change their skin until they undergo the change to the pupa state, and even then the outer covering seems only to harden and form a case for them: others prepare cocoons before the change. The wingless *Nycteribiidæ* and other apterous species belong to this order as well as the *Pulicidæ* or fleas, which though apterous are in form and habits allied.

The neuration of the wings has been made use of in the classification of the Diptera in part by Fallen, but not to the extent that has been observed in the Hymenoptera. The families of the order are now distributed as follows:—

I.—ORTHORAPHA—pupa incomplete.

A.—Nemocera.—Diptera which have the antennæ filiform and composed of more than six joints: palpi 4-5 jointed. Includes all the families in the following list from the *Cecydomyidæ* to the *Tipulidæ*.

B.—Brachycera.—Diptera which have the antennæ short and apparently only 3-jointed ; the *scapus* normal and the first joint of the *flagellum* abnormally developed and converted into a sensorial organ : palpi 1-2 jointed. Includes all the families from the *Xylophagidæ* to the *Dolichopodidæ*.

II.—CYCLORAPHA—pupa coarctate.

A.—Proboscidea.—Diptera furnished with a proboscis and whose larvæ have an æsophagal frame. Includes all the families from the *Syrphidæ* to the *Diopsidæ*.

B.—Eproboscidea (Pupipara).—Proboscis wanting, body coriaceous and no æsophagal frame.

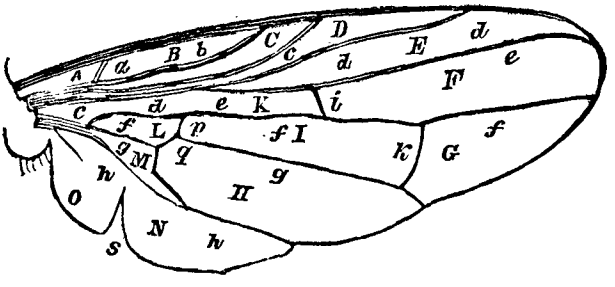
III.—SUCTORIA.

Includes the family *Pulicidæ*.

The neuration of the wings finds a common type in the wings of the *Muscidæ*. The frame-work is formed by the longitudinal veins springing from the base which are united together by the transverse veins, the intervening diaphanous space being called cells or cellules.

The following figure (A) explains the terminology of the neuration in Diptera :—

FIG. A.



Explanation—a. transverse shoulder-vein : *b.* auxiliary veins : *c.* to *h.* the first to sixth longitudinal veins : *i.* small or middle transverse vein : *k.* posterior transverse vein : *p.* anterior basal transverse vein : *q.* posterior a basal transverse vein : *r.* rudiment of the fourth trunk : *s* axillary incision. A. B. C. first to third costal cells ; D. marginal cell : E. submarginal cell : F. G. H first to third posterior cells : I. discal cell : K. first or large basal cell : L. second basal cell or anterior small basal cell : M. third basal cell or posterior small basal cell : N. anal or axillary corner of the wing : O. alar appendage (*alula*).

Schiner informs us that in 1868 there were 20,800 species of Diptera described, and at present we may set down the known species as close on 30,000, of which a considerable number belong to India. Many of these insects, as remarked by Van der Hæven, are injurious to us by their puncture: others suck the blood of our domestic animals: some spoil our food by depositing their eggs on it, especially on flesh and cheese, where the larvæ (maggots) are developed. There is, on the other hand, no single species of this order from which we immediately derive advantage, yet much good is afforded by them indirectly. Some feed on and remove carrion and putrescent matters, others live in and on the bodies of the larvæ of more noxious insects. The Diptera live long in the larva state, and but few, except the domestic fly, have a prolonged existence in the perfect state. The mosquitos, gnats, sand-flies, black-flies, eye-flies, daddy long-legs, &c., so well known in India belong to the *Nemocera* group and abound in marshy districts, for their larvæ live in the stagnant water of ponds.

The *Cecidomyidæ* comprise the gall-gnats, minute delicate species remarkable for long hairs on the wings which are easily rubbed off. The *Mycetophilidæ* are called fungus-gnats, their larvæ feeding in great numbers on the mushroom. The *Simulium destinatum* inflicts a short sharp bite and frequently attacks various animals. The larvæ of the *Bibionidæ* are found in the dung of cattle, and the perfect insect differs in the sexes of the same species. The *Culicidæ* furnish the most formidable specimens of the gnat tribe, and the *Tipulidæ* give us the Indian representatives of the daddy long-legs. To the *Brachycera* group belong the *Xylophagidæ* or wood-eaters, and also the *Stratiomyidæ*, a family rich in various forms and well represented in India. The larvæ of the insects of the latter family live in water, have a long flattened body covered by a coriaceous skin, divided into segments, of which the last three form a tail crowned by a radiated expansion of hairs. The skin dries up to form the pupa case, and the perfect insect emerges from an orifice made by it in the second ring. The *Tabanidæ* or gad-flies are very common in the forests along the foot of the hills and also the bot-flies. The former pursue animals to suck their blood, and the latter in order to lay their eggs on the hair in places which are commonly licked by the animals. The eggs then descend through the mouth into the stomach, where they hatch, and larvæ are produced, which,

after a certain time, pass out with the excrement to the ground, where the pupa stage is passed and a new generation of the bot-fly arises. The *múra* fly of Kumaon probably belongs to this section. This insect hovers in the air for some time before alighting and then settles and attaches itself to the skin. Its bite is at first painless, but after a time a troublesome itching is felt and a mark like a bruise arises which eventually forms a sore if not cared for. It is particularly the pest of the Sarju valley.

The *Asilidæ* are largely represented in genera and species in India. The three basal cells are much prolonged and the third longitudinal vein is furcate and the third joint of the antennæ is simple. The insects of the genus *Asilus* are carnivorous and prey on other Diptera and Hymenoptera. The *Bombylidæ* is another family exceedingly rich in Indian forms. To the *Proboscidea* belong the *Syrphidæ* or Aphis-eaters, whose larvæ prey on plant-lice. The perfect insects are so spotted and banded with yellow as to resemble a young wasp and the larvæ are small slender worms of a pale green colour. The common house-fly and the flesh-fly and blue-bottle belong to the *Muscidæ*. Their legless larvæ are well known. The bot-flies are large velvety flies which have very small antennæ and a rudimentary trunk. They take no nourishment in the perfect state, and though they make a loud buzzing noise are merely occupied in selecting a suitable place on which to lay their eggs. To the *Euproboscidea* belong certain small, parasitic, usually apterous flies that prey on the bodies of mammals, birds and insects, and include the sheep-louse or tick so common wherever the Bhotiyas drive their flocks, and the bat-louse that especially abounds on the flying-fox. In the last section are placed the fleas which have a complete metamorphosis like the Diptera proper and are very common in the rains in every hill-station.

DIPTERA.

I.—ORTHORAPHA.

A.—Nemocera.

Family *Cecydomyidæ*—Gall-gnats.

Cecidomyia, *Meigen.*—primaria (Mad.), *Walk.*

Family *Mycetophilidæ*—Fungus-gnats.

Mycetophila, *Meigen.*—bimaculata, *Walk.*

Family *Simulidæ.*

Simulium, *Latr.*—destinatum (Mad.), *Walk.*

Family *Bibionidæ.*

Bibis, *Geoff.*—bicolor, *Walk.*

Plecia, *Wied.*—fulvicollis (N. I.), *Wied.*: ignicollis (Nep.), *Walk.*

Family *Culicidæ*—Gnats.

Culex, *Linn.*—fuscanus (N. I.), *Wied.*: pipiens (In.), *Linn.*

Family *Chironomidæ.*

Chironomus, *Meigen.*—socius (Ben.), *Walk.*

Macropeza, *Meigen.*—gibbosa, *Wied.*

Family *Tipulidæ*—Daddy long-legs: crane-flies.

Caloptera, *Guér.*—nepalensis (Nep.), *West.*

Tipula, *Linn.*—præpotens (Nep.), *Wied.*: venusta (As.), fulvipennis (Nep.), reposita (Nep.), *Walk.*

Pterocosmus, *Walk.*—velutinus, (Nep.), *Walk.*

Ctenophora, *Meigen.*—læta (N. I., Sind.), *Fabr.*: xanthomelana, melanura (Nep.), *Walk.*

B.—Brachycera.

Family *Xylophagidæ*—Wood-gnats.

Xylophagus, *Meigen.*—brunneus, *Wied.*

Phycus, *Walk.*—canescens, *Walk.*

Family *Stratiomyidæ.*

Beris, *Walk.*—javana, *Macq.*

Sargus, *Fabr.*—gemmifer (As.), aurifer (N. I.), *Walk.*: metallinus (Nep.), *Fabr.*

Chloromyia, *Duncan*—sapphirina, *Walk.*: flaviventris, affinis, *Wied.*

Stratiomyia, *Geoff*—rubrithorax (Ben.), solennis, *Macq.*: viridana (Ben.), *Wied.*: minuta (Mad.), pusilla (Mad.), *Fabr.*

Clitellaria, *Meigen.*—heminopla, *Wied.*

Biastes, *Walk.*—indicus, *Saund.*

Pachygaster, *Meigen.*—rufitarsis, *Macq.*

Family *Tabanidæ*—Breeze-flies, gad-flies.

Pangonia, *Latr.*—longirostris (N. I.), *Hard.*: amboinensis, *Fabr.*

Chrysops, *Meigen.*—dispar, pellucidus, *Fabr.*: flaviventris (N. I.), *Macq.*: fasciatus, *Wied.*: stimulans, *Saund.*: ligatus, semicirculus, terminalis, *Walk.*

Hæmatopota, *Meigen.*—roralis, *Fabr.*: cana, *Walk.*

Gastroxides, *Saund.*—ater, *Saunders.*

Tabanus, *Linn.*—indicus, striatus, rufiventris, *Fabr.*: basalis, consanguineus (Mad.), Servillei, rubicundus, *Macq.*: virgo, ardens, dorsilinea, orientalis, rubidus, *Wied.*: inscitus, auriflamma, orientis, tenebrosus (Mad.), internus, *Walk.*

Family *Asilidæ.*

Leptogaster, *Meigen.*—marion, (N. I.), *Walk.*

Dasypogon, *Fabr.*—apicalis, albonotatus (Ben.), nigricauda, dorsalis, *Wied.*: scatophagoides, laphrides, pulverifer, trimelas, imbutus, apiformis, Garamas, Vica (As.), Rhypæ (As.), polygnotus (As.), Balbillus (Nep.), Ambryon (N. I.), Aphrices (N. I.), Damias (N. I.), Echelus (Nep.), Imbrex (Nep.), Libo, Otacilius, Sura, Volcatus, *Walk.*

Discocephala, *Macq.*—Prytanis (N. I.), *Walk.*

Atomosia, *Macq.*—purpurata, *West.*

Laphria, *Meigen.*—hirtipes, *Fabr.*: senomera (Ben.), gigas, *Macq.*: bengalensis, *Wied.*: Elva (N. I.), chrysotelus, elegans, *Walk.*

Nusa, *Walk.*—formis, æqualis, *Walk.*

Michotamia, *Macq.*—analis, *Walk.*

Cormansis, *Walk.*—halictides, (Ben.), *Walk.*

Laxenecera, *Macq.*—flavibarbis (Ben.), albibarbis (Ben.), *Macq.*

Trupanea, *Macq.*—flavibarbis (Mad.), varipes (Ben.), rufibarbis, orientalis, fusca (Ben.), heteroptera (Mad.), Duvaucellii (Ben.), Marcii, maculatus, *Macq.*: hospes (Mad.), Westermanii (Ben.), *Wied.*: Calanus, sigillifera, telifera, contracta, Gobares, univentris, *Walk.*

Erax, *Macq.*—rufiventris, *Macq.*

Asilus, *Linn.*—bifidus (Mad.), annulatus, *Fabr.*: lætus, *Wied.*: Philus (As.), Iamenes, Curiatius, opulentus, penultimus, congedus, paterculus, præfiniens, *Walk.*: bengalensis, Duvaucelii (Ben.), nudipes, trifarius (Mad.), flavicornis (Ben.), *Macq.*

Ommatius, *Ill.*—leucopagon, compeditus, auratus (Panj.), *Wied.*, nanus, *Walk.*

Senoprosopus, *Macq.*—Diardii (Ben.), *Macq.*

Damalis, *Fabr.*—planiceps, *Fabr.*: tibialis, *Macq.*: fusca, *Walk.*

Family *Midasidæ.*

Midas, *Fabr.*—ruficornis, *Wied.*

Family *Bombylidæ.*

Bombylius, *Linn.*—maculatus (Mad.), *Fabr.*: orientalis (N. I.), *Macq.*: ardens, *Walk.*

Anthrax, *Scop.*—Lar (Ben.), *Fabr.*: distigma, *Wied.*: Alexon, dives (As.), collaris (Mad.), basifascia (N. I.), *Walk.*

Family *Therevidæ.*

Thereva, *Latr.*—cylindrica, *Walker.*

Family *Cyrtidæ.*

Henops, *Ill.*—costalis, *Walker.*

Family *Empidæ.*

Hilara, *Meigen.*—Bares, *Walker.*

Family *Dolichopodidæ.*

Psilopus, *Meigen.*—Cupido, cælestis, *Walker.*

II.—CYCLORAPHA.

A.—Proboscidea.

Family *Syrphidæ*—Aphis-eaters.

Microdon. *Meigen.*—stilboides, *Walk.*

Chrysotoxum, *Ill.*—Baphyrus (N. I.), *Walk.*

Syrphus, *Fabr.*—ericetorum (N. I.), *Fabr.*: ægrotus, orientalis (Mad.), *Wied.*: alternans (N. I.), *Walk.*

Baccha, *Fabr.*—Amphithoe, *Walk.*

Eristalis, *Latr.*—crassus (N. I., Nep.), *Fabr.*: chrysopygus (As.), *Wied.*: solitus (Nep.), amphicrates (N. I.), Andræmon (As.), Æsymnus, *Walk.*

Helophilus, *Meigen.*—quadrivittatus, bengalensis, *Wied.*

Xyleta, *Meigen.*—Æthusa, *Walker.*

Cèria, *Fabr.*—eumenioides (N. I.), *Saund.*

Family *Tachinidæ.*

Tachina, *Meigen.*—nigricornis, *Wied.*: tepens (Mad.), Sacontala (Nep.), Titan (As.), Psamathe (Mad.), Zabina (N. I.), fusiformis, *Walk.*

Zona, *Walk.*—pietipennis (Nep.), *Walk.*

Family *Dexiadæ.*

Dexia, *Meigen.*—serena (Mad.), *Walk.*

Family *Sarcophagidæ.*

Sarcophaga, *Meigen.*—ruficornis (N. I.), *Wied.*

Family *Muscidæ.*

Idia, *Meigen.*—xanthogaster (N. I.), *Wied.*

Musca, *Linn.*—pallens, *Desv.*: orientalis, flaviceps, *Macq.*: Phallia (N. I.): Metilia (Nep.), *Walk.*

Sphyracephala, *Say.*—Hearseiana (Nimach), *West.*

Family *Anthomyidæ.*

Anthomyia, *Meigen.*—Peroe (Mad.), *Walk.*

Family *Cordyluridæ.*

Scatophaga, *Meigen.*—stercoraria, *Latr.*

Family *Sciomyzidæ.*

Sepedon, *Latr.*—Crishna (Nep.), *Walk.*

Family *Micropezidæ.*

Nerius, *Wied.*—rubescens (Mad., Ben.), *Macq.*

Family *Ortalidæ.*

Oxycephala, *Macq.*—pictipennis, *Walk.*

Ortalis, *Fallen.*—Isara (N. I.), *Walk.*

Ulidia, *Meigen.*—melanopsis (N. I.), *Walk.*

Family *Trypetidæ.*

Trypeta, *Meigen.*—Tucia, Stella (N. I.): Mutyca, *Walk.*

Family *Diopsidæ*.

Diopsis, *Linn.*—indica, Hearseiana (N. I.), *West.*: Sykesii (Bom.), *Gray*.

B.—Eproboscidea, Pupipara,

Family *Hippoboscidæ*.

Hippobosca, *Linn.*—variegata (Ben., Mad.), *Wied.*: Francilloni (Ben.), *Leach*.

Ornithobia, *Meigen.*—pallida (N. I.), *Meigen*.

Ornithomyia, *Latr.*—nigricans (Ben.), *Leach*.

Family *Nycteribiidæ*.

Nycteribia, *Latr.*—Hopei (Ben.) : Roylii (N. I.) : Sykesii, *West*.

III.—SUCTORIA.

Family *Pulicidæ*.

Pulex, *Linn.*—irritans, *Linn*.

References.

Macquart, M.—Histoire Naturelle des Insectes Diptères. Paris, 1834-35: Diptères exotiques. Paris, 1838-40.

Westwood.—Mod. Class Ins., II. 496: Trans. Zool. Soc. I. 275 (*Nycteribiidæ*): Arc. Ent. t. 13, 14, (*Midasidæ*): Cab. Or. Ent. t. 18.

Walker, F.—List of the specimens of Dipterous insects in the British Museum, Pts. I—VI., 1848-54: contains descriptions of most of the new Indian species.

Osten-Sacken—Diptera of the United States. Washington, 1880.

MYRIAPODA.

Myriapoda.

The class myriapoda is one belonging to the sub-kingdom Articulata and includes the animals known as centipedes, millipedes and one kind of glow-worm. They do not undergo a metamorphosis properly so called, though in some the number of rings and feet augment as they grow. The buccal apparatus consist in most of two mandibles which are toothed at their broad extremity and of a four-lobed underlip whose two lateral lobes represent the maxillæ of insects. In some the second pair of feet are soldered together at the base and form a second underlip which serves as a protection to the oral organs and the first pair of feet, and in others these parts coalesce and form a suctorial apparatus. There is no separation between the thorax and abdomen and the whole body is ringed and has attached to its under

surface the legs, which number twenty-four or more and are terminated by a single claw. Most of them have two clusters of simple eyes, but in some the eyes are wanting. The antennæ are as a rule short and thread-like. They are distributed into the following sub-orders and families :—

I.—*Chilopoda* or foot-jawed.

a.—*Cermatiidæ*.

b.—*Scolopendridæ*. Centipedes.

c.—*Geophilidæ*. False glow-worm.

II.—*Chilognatha* or jaw-jawed.

a.—*Glomeridæ*. Millipedes.

b.—*Polydesmidæ*.

c.—*Julidæ*. Snake millipedes.

The *Chilopoda* are carnivorous in their habits and live on insects that prey on vegetable matters. Their mandibles are half-leg and half-jaw, like the *falces* of the scorpion, and in the centipedes are provided with a poison sac and gland with which their prey is benumbed. The *Cermatiidæ* are easily recognised by their thin body, long legs, long antennæ and correspondingly long ultimate pair of legs. The *Geophilidæ* are small, long and narrow with numerous short legs, often forty or more. Several species of this family emit a phosphorescent light at the breeding season. The *Chilognatha*, on the other hand, have an oral aparatus fit for manducation and are vegetable feeders, doing considerable damage to garden and other crops; they also consume dead earth-worms and small molluscs. Many have the power of emitting a very unpleasant unctuous fluid with an acid reaction. They have also the habit of rolling themselves up spirally with their head in the middle, and in this position hybernate. A common rufous form may be found on the roads after the rains have commenced crawling over each other in hundreds.

Class MYRIOPODA—Centipedes.

I.—CHILOPODA.

Family *Cermatiidæ*.

Cermatia, *Is.*—nobilis, *Templ.*: Hardwickei, Downesii (Cen. In.), rubrilineata, *Newp.* : longicornis (Mad.), *Fabr.*: serratipes (Mad.), *Gerv.*

Family *Scolopendridæ.*

Scolopendra, *Gerv.*—tigrina (Oudh), formosa (Ben.), silhetensis, Hardwickei, concolor (Ben.), tuberculidens, *Newp.:* de Haanii, *Brandt.*

Cryptops, *Leach.*—nigra (N. I.), *Newp.*

Family *Geophilidæ.*

Mecistocephalus, *Newp.*—punctifrons (Mad.), *Newp.*

II.—CHILOGNATHA.

Family *Glomeridæ.*

Zephronia, *Gray.*—heterostictica (Mad.), glabrata, *Newp.:* chitonoides (Mad), tigrina, zebraica (Bom.), nigrinota (As.), lutescens, lævissima (Sik.), excavata, (Sik.), atrisparsa (Bom.) *Butler:* inermis (Mad.), *Humb.*

Sphærotherium, *Brandt.*—politum (Sik.), maculatum (Sik.), *Butler:* javanicum, *Guér.*

Family *Polydesmidæ.*

Polydesmus, *Latr.*—depressus ; stigma (Mad.), *Fabr.*

Family *Julidæ.*

Julus, *Linn.*—fuscus, crassus, indicus, *Linn.:* carnifex (Mad.), *Fabr.:* malabaricus, spinicaudus (Mal.), *Dus.:* nitens, *Mur.*

Spirobolus, *Brandt.*—punctulatus (Cal.), *Newp.*

Spirostreptus, *Brandt.*—nigrolabiatus (Mad.), maculatus (Cal.), cinctatus (Mad.), *Newp.*

Lysiopetalum, *Brandt.*—Hardwickei (Nep.), *Gray.*

References.

Koch, C. L.—System der Myriapoden. Regensburg, 1847.

Gervais—Histoire Naturelle des Insectes Aptères, Vol. IV. Paris, 1847: An. des Scien. Nat. 2nd Ser. VII. 35 (1837): 3rd Ser. II. 51 (1844).

Newport.—List of the myriapoda in the British Museum, 1844: Catalogue of the same, 1856: An. Mag. N. H. n. s. XIII. 94, 263: XIV. 49.

Butler.—Descriptions of new species. An. Mag. N. H. 4th Ser. X. 354: XIV. 185: P. Z. S., 1873, p. 172: Trans. Ent. Soc., 1878, p. 302.

Murray.—Economic Entomology (Aptera)—South Kensington Museum Handbook.

CHAPTER III.

HISTORY.[1]

CONTENTS.

Law of distribution. Khasas. Bhotiyas. Immigrants. Sources of information. Vaidik geography. Vaidik ethnography. Aryas and Dasyus. Itihása period. Nágas on the Jumna. Pándavas retire to the Himálaya. Manu. Allusions to Badari in the sacred texts. Pauránik period. Discovery of Kailás. The Puránas. The fashioning of the earth. Meru. Boundaries of Meru. Local geography in the Brahmánda and Váyu Puránas. The Mánasa-khanda of the Skanda Purána. The Kedára-khanda.

Law of distribution.

In a previous chapter[2] we have given a general sketch of the principal races of men inhabiting the Himálaya-Tibetan region. We have shown how their distribution, their character and their habits have all been affected by the physical circumstances of the country in which they live; how physical unfitness has retarded the diffusion of particular races, and how physical adaptation has encouraged it. The operation of these general laws is well exhibited in Kumaon and Garhwál. Here the entire tract between the snowy range and the plains of Hindustán is in its main physical characteristics Indian. The country which lies between the snowy range and the ghát-range or water-parting is on the other hand entirely Tibetan in its character. These statements are more especially true of the inhabited portions of the two regions. The mass of the population of the first-named tract is found in the valleys and the lower slopes of the mountains below an elevation of 6,000 feet. Here the climate is thoroughly Indian; a well-marked winter, almost entirely without snow, is followed by a summer of nearly tropical heat that is further succeeded by a season of periodical rain. The vegetation is semi-tropical in its character and the common agricultural productions are those of the plains of northern India. In the valleys beyond the snowy range, the Bhot of the inhabitants of the lower hills, we find

[1] In this chapter it is intended to give only the general ethnography, reserving census and caste details and folk-lore for the notices of each district given hereafter. So far as possible matters affecting the Kumaon Himálaya will alone be noticed, but much concerning other portions of the great range must be incidentally mentioned, for which the fuller explanation may be obtained by following up the references given in the foot-notes.

[2] Chapter I., Vol. I.

ourselves under altogether different conditions. The heavy falls of snow in the winter months give to the climate at that season an even more than Tibetan rigour. The summer is always temperate and the periodical rains fall only as moderate showers. The vegetation is scanty and sub-arctic in its character and the late spring and early autumn restrict agricultural operations to one precarious summer crop of a few of the hardier products of northern countries. Precisely then as the climatal conditions of the Himálaya approach those of India on the one hand or of Tibet on the other, so do we find that the Hindu or the Tibetan element prevails among its inhabitants.

Khasas. Bhotas. Immigrants.

In considering the origin and position of the races inhabiting the Himálaya between the Tons and the Sárda, it will be necessary to discuss the ancient geography, history and ethnography of the tract, for the materials for these really separate studies are one and the same and it would lead to much useless repetition to separate them so as to make each intelligible by itself. We shall therefore in the following pages combine all that we have been able to gather regarding the early history, geography and ethnography of the Kumaon Himálaya, and although it may take us into what at first sight may appear to be matters unconnected with our subject, a little reflection will show that where the materials for positive deductions are wanting, we can only arrive at some certainty by establishing negative propositions. The Himálaya of these provinces is not an isolated tract separated from the rest of the Himálaya to the west or from India on the south by such physical or ethnographical boundaries as would give it a peculiar character and would lead to a well-marked local history. On the contrary though, as we shall see, it has a local mediæval and modern history, its earlier history must be looked for in the notices that we possess regarding the western Himálaya as a whole, and it is only after a careful and comprehensive view of those notices that we can arrive even at the negative conclusions which are all that we can expect to establish in the present state of our knowledge. It is still, however, of some advantage to show that many of the existing theories regarding the origin of the people of these hills are devoid of foundations in fact and are otherwise impossible. We shall endeavour, therefore, to trace out every reference to this section of

the Himálaya and thus afford indications which in the absence of more precise information will enable us to form some conception of its position in history. We hope that it is hardly necessary formally to deprecate the criticism of those who have the inestimable advantage of access to great libraries and the society of the learned. The following pages simply profess to be suggestive notes on a comparatively virgin field in Indian archæology and are the fruit of the leisure minutes, we may say, of an unusually laborious Indian official life. We shall leave to those most competent to decide the ultimate value of the results of our researches into Kumaon history; but, in any case, we believe that we have added something of permanent value to existing knowledge and leave to others the task of completing the work. The Hindu writers, though professing to give in many cases the geography and history of the countries known to them, have with an universal persistence disfigured their accounts with the most puerile and groundless stories and have so mingled truth and fiction that it is difficult in any case and impossible in most cases to distinguish facts from fables. With the exception of the Kashmír chronicles we are not aware of any writing that deserves to be called an historical composition, but none the less is it necessary to consult these records and endeavour to collect from them the historical indications that they still assuredly possess.

The great mass of the population in Kumaon and Garhwál profess a belief little differing from the orthodox Hinduism of the plains. The existing inhabitants belong to the Khasa or Khasiya race and speak a dialect of Hindi akin to the language of the Hindus of Rájputána. All their feelings and prejudices are so strongly imbued with the peculiar spirit of Hinduism that although their social habits and religious belief are often repugnant to those who strictly observe the orthodox ceremonial usages of Hinduism, it is impossible for any one that knows them to consider the Khasas to be other than Hindus. There are several facts connected with their history that show, whatever their origin may have been, the Khasas have for centuries been under the influence of the Brahmanical priesthood. The shrines of Kedár and Badari are both within Garhwál and from time immemorial have been visited by crowds of pilgrims from all parts of India, whose enthusiasm for Hinduism must have acted on the hill men brought into connection

with them as guides and purveyors. Again, many of these pilgrims took up their residence in the hills and leavened the manners and observances of the rough indigenous population. Many other immigrants arrived to take service amongst the petty princes of the hills or to receive their daughters in marriage, and thus we find a considerable sprinkling of families all through these hills who consider themselves one with the various castes in the plains whose tribal name they bear. To the north in the inter-alpine valleys of Bhot, we have a tribe of decided Tibetan origin and whose affinities are found in the trans-Himálayan tribes of Hundes. They are known as Bhotiyas by the people of the lower hills, who in turn are designated Khasiyas by the Bhotiyas, whilst the people of the adjoining portion of Tibet are known as Hunas or Huniyas. In addition to the tribes already enumerated there are the Rájis or Rájyas, the modern representatives of the Rájya-Kirátas and the Thárús and Bhuksas of the Tarái lowlands and traces of the Nágas and Sakas, whilst others contend that we have here also old Baktrian (Yavana) colonies. For our present purpose it is only necessary to observe that there are, at the present day, three great divisions of the population, the immigrants from the plains, the Khasas and Bhotas. With regard to the first division we shall reserve the detailed examination of their individual claims to the local accounts of each district which will follow hereafter. Here we shall endeavour to ascertain who these Khasas, Bhotas, Hunas, Sakas, Yavanas, Nágas, and Rájya-Kirátas were and what was their position with regard to the neighbouring tribes, a study that will necessarily lead us to consider the general history of ancient India wherever these names occur and much that might appear foreign to our purpose, but which bears materially on the conclusions to which we shall eventually arrive.

Early knowledge.

It is not often that the Hindu writers tell us much that we can depend upon regarding the peoples of ancient India, yet it may be gathered from them that at a very early period, the compilers of the sacred books possessed a considerable knowledge of the geography of these mountains. This knowledge, though veiled in the later works by a cloud of silly legends, is none the less real and, when stripped of the marvellous, can be verified, at the present day. In Vaidik times, when the

elements were worshipped, when the primal manifestations of nature absorbed the devotion of the Aryan immigrants, the noble range of the Himálaya fitly called 'the abode of snow,' was looked on as the home of the storm-god, the mother of rivers, the haunt of fierce wild beasts and more fierce wild men. It then received the homage justly due to it as the greatest and most formidable of all the mountain systems that the Aryans had met with and was finally declared to be the home of the gods. From the earliest ages, the great, the good, and the learned have sought its peaceful valleys to enjoy nearer communion with the deity. In the manuals of the later Pauránik records we find almost every hill and river reverently and lovingly described and dedicated to some one or other of the members of the great pantheon. Legends of the gods and saints and holy men adorn the story of each peak and pool and waterfall and give that realistic turn to the teaching of the earlier priesthood which appears to have been peculiarly adapted to the Hindu mind. "He who thinks[1] of Himáchal, though he should not behold him, is greater than he who performs all worship in Káshi. In a hundred ages of the gods I could not tell thee of the glories of Himáchal. As the dew is dried up by the morning sun, so are the sins of mankind by the sight of Himáchal."

Sources of information.

The sources of our information may be thus briefly indicated:—First the Vaidik records. Max Müller assigns a date between 1200 and 1000 B.C. to the older hymns of the Rig-Veda;[2] Haug places their composition between 2400 and 2000 B.C.; and Duncker states that the immigration of the Aryas took place about 2000 B.C., and the origin of the oldest songs of the Veda cannot, therefore, be considered earlier than the sixteenth century before Christ. For the songs of the Mantra period containing the later hymns Max Müller gives 1000 and 800 B.C. as the date of their composition, whilst Haug and others place them between 2000 and 1400 B.C. The works of Müller's Bráhmana period include the Bráhmanas, Upanishads, Aranyakas, and similar writings chiefly expository of those of the preceding period which are included in the *Sanhitas* or collections of the four Vedas. To the Sútra period are assigned the six *Vedángas*

[1] From the *Mánasa-khanda* of the Skanda Purána in Sir John Strachey's notes, to which also I am indebted for a paraphrase of a portion. [2] See Hist. Anc. Sans. Lit.: Duncker, Hist. Ant. IV, 30.

or branches of Vaidik exegesis and the Sútras or redactions of the ancient *Sákhás* containing aphorisms relating to sacrificial and domestic duties and the like. These last belong to the Smriti or traditional class. The epic poems or Itihásas form the second division and are represented by the Mahábhárata[1] and the Rámáyana. To the third division and latest in point of time belong the Puránas and their continuations to the present day, including the local collections of legends regarding the lives of the saints, the holy places and the miracles performed there. From the earlier Vaidik records we learn that the Aryas came from Central Asia and established themselves on either bank of the Indus. The greater number of the hymns of the Rig-Veda refer to this period of the Aryan history and distinguish between the immigrants and the aborigines. To the latter they give the generic name of Dasyu, which subsequently included the non-Aryan tribes as well as those of Aryan descent who separated from Aryan practices in matters of religion and polity. The later Vaidik records indicate the gradual advance of the Aryas to the south-east until we find them in the Itihása or epic period occupying the whole of the upper Duáb.

Vaidik geography.

The geographical indications in the Rig-Veda are of the most meagre description and consist of the enumeration of certain rivers in the celebrated 'hymn to the rivers' and the names of a few tribes and countries.[2] The rivers named show that the Aryas were then living in the tract between the Indus and the Satlaj and were not well acquainted with the region between the latter river and the Ganges. The rivers Ganges and Drishadvati or Kaggar are named but once, the Sarasvati and Jumna are only mentioned a few times, but the Sindhu or Indus is frequently referred to, and to it as 'the most copious of streams' the river-hymn is addressed. In one verse, the other rivers are asked to receive this hymn :—"Receive my hymn, O Ganga, Yamuna, Sarasvati, Sutudri, along with the Parushni : listen,

[1] As to the date of this work, see Gazetteer, II., 60, note. That the principal part of the Mahábhárata belongs to a period previous to the political ascendancy of Buddhism had been proved by Professor Lassen ; Müller's History above quoted, p. 62. The archaic portions of the Mahábhárata may be earlier than some of the works of the Smriti class and the older portions of the Vishnu Purána may be earlier than portions of the Rámáyana, but still the general statement given above is correct. [2] Etude sur la géographie et les populations primitives du nord-ouest de l'Inde d'après les Hymnes Védiques, by M. V. de Saint-Martin Paris, 1860. Muir's Sansk. Texts, II., 341, 353.

O Marudvriha along with the Asikni and Vitasta ; O Arjíkíyá along with the Sushoma." In the succeeding verse the Rasa, Sveti, Kubhá, Gomati, and Krumu are mentioned as tributaries of the Indus. The Sutudri is the Satlaj : the Parushni is the Irávati or Ravi : the Marudvriha is the Chináb after its confluence with the Jhelam : the Asikni is the Acesines or Chináb, and the Vitasta is the Hydaspes or Jhelam. The names Arjíkíyá and Sushoma signify, according to Lassen, vessels used in the preparation of the Soma juice and are not the names of rivers. The Kubha is the Kophenes or Kábul river, the Krumu and Gomati being the Kurum and Gomal rivers. The Sveti is the Swát river and the Rasa appears to be some other affluent of the Kábul river. The earliest seat of the Aryas in India is therefore the lower Kábul valley and the adjoining tract along the Indus, a place of which we shall have much to say hereafter. The knowledge of the Himálaya is confined to certain allusions to winter: thus in the Rig-Veda we have[1] the prayer :—" May we rejoice living a hundred winters (*satahimáh*) with vigorous offspring." In the Atharva-Veda the following passages occur :—" He whose greatness these snowy mountains (*himavanto*) and the sea with the aerial river declare." " May thy mountains be snowy (*himavanto*), O earth, and thy wilderness beautiful." Again in the same work the medicinal plant *kushtha* is said to be produced to the north of the Himavat and to be carried thence to the east. In the Aitareya-Bráhmana the Uttara Kurus are referred to thus :—" Wherefore in this northern region all the people who dwell beyond the Himavat (called) the Uttara Kurus and the Uttara Madras are consecrated to glorious rule." In a passage of the Kaushítaki-Bráhmana[2] it is written :—" Pathyá Svásti (a goddess) knew the northern region. Now Pathyá Svásti is Vách (the goddess of speech). Hence in the northern region speech is better known and better spoken and it is to the north that men go to learn speech : men listen to the instructions of any one who comes from that quarter, saying, 'he says (so and so),' for that is renowned as the region of speech." On this the commentator remarks :—" Language is better understood and spoken' : for Sarasvati is spoken of (as having her abode) in Kashmír, and in the hermitage of Badariká (Badrináth in Garhwál) the sound

[1] *Ibid*, p. 323. [2] Written by Sankhayana for members of the Kaushítaki Sákha : see Müller, Anc. Sansk. Lit., 180, 346 : Weber, Hist. Ind. Lit., p. 50.

of the Vedas is heard." So also Lassen :—"An account is to be found in an ancient record, according to which the Sanskrit had been preserved in greater purity in the northern countries than elsewhere, and Kashmír and Badari, at the sources of the Ganges, are specified by the commentator as such regions. This is, however, not sufficient to prove that in the different provinces of India there were then fundamental differences in the sacred language." The medical treatise of Charaka makes the physician Bharadvája a disciple of Indra and assigns to the neighbourhood of the Himálaya that gathering of sages out of which came the instruction of Bharadvája by Indra. The treatise referred to has, according to Weber,[1] "rather high pretensions to antiquity ; its prose here and there reminds us of the style of the Srauta-sutras." From the later Vaidik records, therefore, we learn that as early as several centuries before the Christian era the shrine of Badari was celebrated as a seat of learning and as the abode of holy men.

Vaidik ethnography.

We next turn to the names of the peoples known to the Vaidik writers. In a verse of the Rig-Veda Visvámitra asks :—"What are thy cows doing amongst the Kíkatas ? They yield no milk for oblations and they heat no fire," implying that they were a people who knew not Aryan rites. Again in the Atharva-Veda, in an invocation to Takman, the personification of itch, as Chachak Devi is now of small-pox, it is said that his abode was among the Mújavats and Mahávrishas. As soon as born he sojourned amongst the Báhlikas, and he is here desired to depart to the Gándháris, Mújavats, Angas, and Mágadhas. The Kíkatas are elsewhere explained to be one with the Mágadhas or people of Behar. The Báhlikas are the people of Balkh ; Gandhára is the tract around Peshawar, and the Mújavats are elsewhere explained[2] to be a mountain tribe of the north-west frontier. In the Bráhmanas, the name 'Báhíka' is applied to the tribes of the Panjáb generally, and it would appear that they as well as the Kámbojas, a frontier tribe to the north-west, spoke a dialect of Sanskrit, for Pánini, in his grammar, explains the dialectic differences between the speech of the Aryas and that of the Báhíkas and Yaska those between the Aryan speech and the language of the Kámbojas. There is also evidence[3] to show that the people of Gandhára were in

[1] *Ibid*, p. 268. [2] In the Mahábhárata. [3] Muir, II., 353.

the habit of holding intercourse and contracting alliances with the Aryas. From these indications Muir argues that :—"Although in individual passages of the Mahábhárata hatred and contempt are expressed in reference to the tribes living along the Indus and its five great tributaries, yet there is no trace of these tribes being regarded as of non-Indian origin." * * * "The Indians distinguish not expressly, but by implication, the nations dwelling between the Indus and the Hindu Kush into two classes: first those to the eastward of the Indus, and some of those immediately to the westward of that river, as the Gandháras, are in their estimation Indians; . . . . . but with the exception of the Kashmíras and some less known races these Indians are not of the genuine sort: the general freedom of their customs is regarded as a lawless condition." And Weber[1] similarly remarks :—"The north-western tribes retained their ancient customs which the other tribes who migrated to the east had at one time shared. The former kept themselves free from the influence of hierarchy and of caste which arose amongst the latter as a consequence of their residence amongst people of alien origin (the aborigines). But the later orthodox feelings of the more eastern Aryas obliterated the recollection of their own earlier freedom and caused them to detest the kindred tribes to the westward as renegades, instead of looking on themselves as men who had abandoned their own original institutions." Thus we have three classes of inhabitants in Upper India, that branch of the Aryas to whom the composition of the Vedas is to be attributed; their brethren in race and language who did not follow them in the development of their religious system and the aboriginal tribes.[2]

Aryas and Dasyus.

The question remains as to who were Aryas and who were Dasyus. The primitive meaning of the word 'Arya' is still a subject of discussion. Some trace it throughout the Indo-European region in the 'Airya' of the ancient books of Persia; in the name 'Ariana' applied to the

[1] Quoted from *ibid.*, 354. [2] It may be well to notice here in what respect the tribes not belonging to the four classes, such as the Báhíkas and Khasas, offended the prejudices of the twice-born. One of the charges brought against them is the boldness and unchastity of their women, "who sang and danced in public, drunk and undressed, wearing garlands and perfumed with unguents." Another charge is that they had no Veda, no Vaidik ceremony and no sacrifice. Again, a Brahman then becomes a Kshattriya, a Vaisya or a Sudra, and eventually a barber. The aboriginal tribes would also seem to have been in the habit of burying their dead. Muir, II., 412, 482. [3] Van den Gheyn. Le nom primitif des Aryas. Précis Historiques, 1880.

tract comprising Herát, Afghánistán, Khorasán, and Biluchistán; in the name 'Aryaka' (Irák); in the word 'Ariya' in the inscriptions of the Achæmenides; in the name 'Iran' in those of the Sassanides; in the 'Arioi' (Ossetes) of the Caucasus; in 'Argeia,' an old name of Greece; in the name 'Hermann' (Arminius) in Germany; and even in 'Erin,' the old name of Ireland. The meaning attached to the word in the earlier hymns of the Rig-Veda appears, however, to be 'light-coloured,' 'pale,' 'white,' as compared with the Dasyus or black Antocthones. Gradually as the Aryan forces advanced the word carries with it the meaning of free, noble, brave, masterful, wise, as opposed to the enslaved, debased, and ignorant Dasyus, and here we find the white-faced immigrants[1] called collectively the Aryan '*varna*,' or 'colour', a word which is to-day translated by caste (*baran*). The Greeks also knew of this contrast between the dark and light coloured races of India, for Ktesias records[2] that the Indians were white and black, and that he himself had seen several of the fairer race. The Dasyus are described as a black-skinned race who despised the rites and ceremonies of the Aryas, and again as goblins and demons inhabiting the forests and mountains of the frontier countries. In the Rig-Veda it is recorded[3] that Indra, "armed with the lightning and trusting in his strength, moved about shattering the cities of the Dasyus," and the gods are prayed to "distinguish between the Aryas and those who are Dasyus:" "By these (succours) subdue to the Aryas all the hostile Dása people everywhere, O Indra, whether it be kinsmen or strangers who have approached and injuriously assailed us, do thou enfeeble and destroy their power and vigour and put them to flight."—"Who delivered (us) from the destroyer, from calamity; who, O powerful (god), didst avert the bolt of the Dása from the Arya in (the land of) the seven streams."—"He who swept away the low Dása colour" (*varnam*)—"scattered the servile hosts of black descent"—"conquered the black-skin." Again Manu writes that those tribes which are without the pale of the castes, whether they speak the language of the Mlechchhas or of the Aryas, are called Dasyus,[4] and there is not

[1] Muir, Sans. Texts, II. 360: '*hatvi dasyún pra áryam varnam ávat;*' slaying the Dasyus he protected the Aryan colour.' [2] M'Crindle's Ktesias, p. 13.
[3] Muir, *l. c.*, 358. [4] The Dasyus had chiefs over each tribe, several of whom are named. They lived incities, were intelligent and knew the law, but did not adopt the Brahmanic ritual, especially the complicated system of sacrifice requiring the aid and presence of several priests. See Muir, II., *passim*.

wanting evidence to show that some of the opponents of the orthodox immigrants to whom we owe the Vedas were of their own colour or caste. In the hymns of the Rig-Veda we have addresses to Indra implying the existence of Aryan foes as well as Dasyus:—"Do thou, heroic Indra, destroy both these our foes (our) Dása and our Arya enemies"—"May we, associated with thee, the mighty one, overcome both Dása and Arya through thy effectual energy"—"Whatever ungodly person, Dása or Arya, designs to fight against us, let these enemies be easily subdued by us." The Aryan tribes, we further learn, were divided into clans, each under its own Raja, and the newcomers pressed on the old settlers and fought with them. A formidable coalition of the Bharatas and others whose family priest was Visvámitra attacked the Tritsus on the Sarasvati, whose spiritual guides belonged to the family of Vasishtha, and we have the prayers of both priests invoking the aid of Indra in the coming battle. The Bharatas were defeated and the song of victory of Vasishtha shows us that the enemies against which his side fought were Aryas. In the Aitariya-Bráhmana, the author, after quoting a saying of Visvámitra, adds—"Most of the Dasyus are descended from Visvámitra." Thus we see how certain Aryas who did not follow the orthodox guides became classed with the aborigines, and thus arises one source of the great confusion observed in the later ethnology. The system existing on earth was also transferred to the sphere of the gods, and here we find the Dasyu race represented by the Rákshasas, Dánavas and Daityas, sometimes the rebellious subjects and sometimes the slaves[1] of the deities. It is in the later records that most details are given, but before proceeding further we will note the route by which the Aryas passed into Upper India. So late as 1840, Professor Benfey argued that most probably the Aryas dwelt for some time in little Tibet, near the sources of the Indus, before passing into India, and that the route adopted by them was through the passes along the Kumaon and Garhwál frontier to Indraprastha. In this view he was supported by Professor Weber as the only one consistent with the materials at their disposal. On reading through the Rig-Veda, however, both these eminent scholars abandoned this position and agreed in the result now generally accepted, that the Aryan tribes moved from Baktria into India by

[1] Dasyu is connected with *dása* in the sense of 'slave'; Muir, II., 367.

the Hindu Kush through the Kábul valley and across the Indus[1] to the Sarasvati, the route that has been taken in every successive great invasion of India.

Itihása period.

From the Sarasvati, the Aryas pressed on and occupied the upper Duáb, and it is here we find them in the Itihása period, when the Mahábhárata was written. The Uttara Kurus are now mentioned as living in Hari Varsha, as a people whom no one attempts to conquer and their country as the home of primitive customs. In describing the condition of the southern Kurus it is said that "they vied in happiness with the northern Kurus." In the Rámáyana, it is recorded that the Uttara Kurus are liberal, prosperous, perpetually happy and undecaying. In their country there is neither cold nor heat, nor decrepitude, nor disease, nor grief, nor fear, nor rain, nor sun, a description which has been localised in Kumaon, but here agrees better with the tract to the north of the Kashmír valley. Lassen remarks that though the country of Harivarsha belongs to the region of mythical geography, the existence of the Uttara Kurus has a basis of geographical fact from (1) the way the country is mentioned

[1] *Ibid.*, 309, 337. Lassen writes:—"The diffusion of the Aryas towards the south, points to the conclusion that they came from the north-west from the country north of the Vindhyas, probably from the region bordering on the Jumna and the eastern part of the Panjáb. Their extension to the east between the Himálaya and the Vindhya also indicates the same countries as their earlier seats. We find, moreover, evident traces of the Aryas, in their advance from the north-west, having severed asunder the earlier population of Hindustan and driven one portion of it towards the northern and another portion towards the southern hills. Further, we cannot assume that the Aryas themselves were the earlier inhabitants who were pushed aside: for the inhabitants of the Dakhin, like those of the Vindhyan range, appear always as the weaker or retiring party, who were driven back by the Aryas. We cannot ascribe to the non-Aryan tribes the power of having forced themselves forward through the midst of an earlier Aryan population to the seats which they eventually occupied in the centre of the country; but, on the contrary, everything speaks in favour of their having been originally settled in those tracts where we find them at a later period and of their having once occupied an extensive territory." Again, he writes:—"There is only one route by which we can imagine the Aryan Indians to have immigrated into India; they must have come through the Panjáb and they must have reached the Panjáb through western Kábulistán. The road leading from the country on the Oxus into eastern Kábulistán and the valley of the Panjkora or into the upper valley of the Indus, or from Gilgit over the lofty plateau of Deotsu down on Kashmír, roads now known to us as the roughest and most difficult that exist and do not appear to have been ever much or frequently used as lines of communication. We can only imagine the small tribes of the Dáradas to have come by the second route from the northern side of the Hindu Kush into their elevated valleys, but we cannot suppose the mass of the Aryas to have reached India by this road. All the important expeditions of nations or armies which are known to us have proceeded through the western passes of the Hindu Kush, and if we suppose the Aryan Indians to have come into India from Baktria, this is the only route by which we can assume them to have arrived."

in the Vedas ; (2) its existence in historical times[1] as a real country, and (3) its being referred to as the home of primitive customs.

As regards the frontier tribes, the Mahábhárata mentions the conquest by the Pándavas of "the Utsavasankatas, seven tribes of Dasyus, inhabiting the mountains." Again, "Pákasásani conquered the Daradas with the Kámbojas and the Dasyus who dwell in the north-east region, as well as the inhabitants of the forest, with the Lohas, the farthest Kámbojas and the northern Rishikas." Moreover, Saineya, the charioteer of Krishna, is said to have "made the beautiful earth a mass of mud with the flesh and blood of thousands of Kámbojas, Sakas, Savaras, Kirátas, Varvaras, destroying thy host. The earth was covered with the helmets and shaven and bearded heads of the Dasyus," clearly intimating that the word 'Dasyu' is here a generic term denoting the whole of the tribes who are previously mentioned in this passage. The same record affirms their connection with the Aryas in the verses :—"These tribes of Kshattriyas, *viz.*, Sakas, Yavanas, Kámbojas, Dráviras, &c., have become Vrishalas from seeing no Brahmans." This statement is repeated subsequently with the addition of the Mekalas, Látas, Konvasiras, Saundikas, Darvas, Chauras, Savaras, Barbaras and Kirátas. Again the Yavanas are said to be descendants of Turvasu, the Vaibhojas to be sprung from Druhyu, and the Mlechchha tribes from Anu. The Mahábhárata thus not only uses the word 'Dasyu' as a generic term for the border tribes, but also makes these tribes to belong to the Kshattriya or warrior race. How it came to pass that these Kshattriyas lost their Aryan status is thus related :—"Satyavrata was degraded to the condition of a Chandála or outcast and called Trisanku on account of three sins (*tri-sanku*) of (1) killing a cow, (2) displeasing his father, and (3) eating flesh not properly consecrated. But on his repentance and feeding the family of Visvámitra during a twelve years' drought, he was transported to heaven. His descendant Báhu was vanquished by the tribes of Haihayas and

[1] Ptolemy describes Serika or China as surrounded by mountain ranges, the Annibian, Auxacian, Asmiræan, Kasian, Thagurian, Emodus and another called Ottorokorræ, and places the Ottorokorræ southernmost of all near the Emodian and Serikan mountains. It was doubtless from the ancient legend quoted in the text that the Greeks derived their idea of the Hyperboreans, the people who lived a thousand years, a long and happy life, free from disease and care in a land all paradise: see McCrindle's Ancient India, 24, 77.

Tálajhangas[1] and died in exile. To him a posthumous son named Sagara was born, who nearly exterminated the Haihayas and would have also destroyed the Sakas, Yavanas, Kámbojas, Páradas and Pahlavas, had they not applied to their family-priest, Vasishtha, for protection. The priest desired Sagara to refrain from the slaughter of those who were as good as dead, for he had compelled the tribes to abandon the duties of their caste and all association with the twice-born, and Sagara thereon imposed on them peculiar distinguishing marks. He made the Yavanas shave their heads entirely, the Sakas to shave the upper half of their heads, the Páradas to wear their hair long, and the Pahlavas to let their beards grow. He deprived them of all religious rites and thus abandoned by Brahmans, they became Mlechchhas."[2] This instructive legend shows us that the writers of the Itihása and early Pauránik periods believed that these tribes had a common origin with themselves, though, as Muir[3] shows, "they, at the same time, erroneously imagined that these tribes had fallen away from Brahmanical institutions: thus assigning to their own polity an antiquity to which it could in reality lay no claim." In another passage of the Mahábhárata we have the statement that "in the region where these five rivers (Panchnad, Panjáb) flow after issuing from the mountains dwell the Báhíkas called Arattas. * * The name of the country is Aratta; the water of it is called Báhíka, there dwell degraded Brahmans, contemporary with Prajápati. They have no Veda, no Vedic ceremony, nor any sacrifice. The gods do not eat the food offered by servile (*dásamíyánám*) Vrátyás. The Prasthalas, Madras, Gandháras, Arátttas, Khasas, Vasátis and Sindhusauvíras are nearly all very contemptible." Here we have the Khasas associated with the tribes of the Panjáb, which would show a more westerly location than Kumaon.

Nágas on the Jumna.

The same record shows us that around Hastinápur,[4] the seat of the Pandu *ráj*, were Dasyus variously known as Asuras, Daityas, Bhillas, Rákshasas and

[1] Assisted by the Sakas, Yavanas, Kámbojas, Páradas and Pahlavas, according to the Váyu Purána; Wilson, VIII., 290. [2] Wilson, VIII., 294, who notes that the Greeks commonly shaved a portion of the head; but it is doubtful whether they ever shaved the head completely. The Skythians shave the fore part of the head, gathering the hair at the back into a long tail, as do the Chinese. The mountaineers of the Himálaya shave the crown of the head, as do the people of Káfiristán, with the exception of a single tuft. It is doubtful who the Páradas are, except the ancestors of the Brahuis may be assigned to them, and then the Pahlavas will be the Parthians. [3] I., 488. [4] In the Meerut district.

Nágas. The great Khándava forest in the valley of the Jumna near Indraprastha or old Dehlí was occupied by the Nágas under their king Takshaka, who were expelled by fire and driven to take refuge in the hills. The Aryas continued their progress and preceded by Agni, the god of fire, occupied the whole country as far as the Sadánira or Gandak. We also read that Arjuna during his exile visited the holy places and at Hardwár met Ulúpi, the daughter of the Nága Rája Vásuki, whom he espoused. The same record gives a brilliant description of the city of the Nága Rája, that it "contained two thousand krores of serpent inhabitants; and the wives of all those serpents were of consummate beauty. And the city contained more jewels than any person in the world has ever seen, and there was a lake there which contained the water of life and in which all the serpents used to bathe." Throughout the Mahábhárata the Himálaya is considered holy ground, the well-loved home of the gods, where there were many places of pilgrimage (*tirthas*).

Pándavas retire to the Himálaya.

After the destruction of Dwáraka, when the Pándavas were told by Vyása that their power had departed and that they should now think of heaven alone, it was to the Himálaya that they retired. Placing Parikshit on the throne of Hastinápur and Yuyutsu in Indraprastha, "Yudhishthira then took off his earrings and necklace and all the jewels from his fingers and arms and all his royal raiment: and he and his brethren, and their wife Draupadi, clothed themselves after the manner of devotees in vestments made of the bark of trees. And the five brethren threw the fire-of their domestic sacrifices and cookery into the Ganges and went forth from the city following each other. First walked Yudhishthira, then Bhíma, then Arjuna, then Nákula, then Sahdeva, then Draupadi, and then a dog. And they went through the country of Banga toward the rising of the sun; and after passing through many lands they reached the Himálaya mountain, and there they died one after the other and were transported to the heaven of Indra." From Kurmáchal in the extreme east near the Káli to Jamnotri and the Dún the wanderings of the Pándavas are noted by some rock or stream commemorating some exploit or calling to mind some scene in the story of their travels. At Deo Dhúra, the grey granite boulders near the crest of the ridge are said to have been thrown there in sport by the Pándavas. Close

to the temple of Devi in the same place are two large boulders, the uppermost of which, called 'Ran-sila,' is cleft right through the centre by a deep fresh-looking fissure, at right angles to which there is a similar rift in the lower rock. A smaller boulder on the top is said to have been the weapon by which Bhíma Sena produced these fissures and the print of his five fingers is still pointed out. Ran-sila itself is marked with the lines for carrying on the gambling game of *pachísi* which even in their wanderings the Pándavas could not abandon. They are also the reputed founders of the five temples to Siva as Kedáreswar and did penance at Pándukeswar close to Badarináth. All along the course of the sacred river are pools and streams, temples and rocks, sacred to the Pándavas and across the Ganges in Tihri, the course of the Jumna is in a lesser degree consecrated to their memory. At Bhímghora above Hardwár the priests show the imprint of the hoofs of Bhíma's horse, and they say that Drona, the preceptor of the Pándavas, resided in the eastern portion of the valley of Dehra Dún, the Drona-ka-asrama of the Kedára-khanda.

Manu.

The law-book of the Mánavas is clearly in its present form the outcome of many hands at various times, but will be more conveniently referred to under the received title 'Manu.' It is still the great authority on the systematic ethnography and cosmogony of the Hindus, and affords us further evidence of the existence of the belief that the majority of the border tribes were regarded as of the same stock as the Aryas, but degraded members of it. It tells us that the references made in the Shástras to castes other than the four is merely "for the sake of convenience and conformity to common usage." Even the very lowest classes, such as the Nishádas and Chándálas, are derived from the miscegenation of the four castes. Like the authors of the Mahábhárata, Manu affirms that the Kshatriya tribes of Paundrakas, Odras, Draviras, Kámbojas, Yavanas, Sakas, Páradas, Pahlavas, Chínas, Kirátas, Daradas, and Khasas, became Vrishalas or outcasts from the extinction of sacred rites and from having no intercourse with Brahmans. Further, as already noticed, he declares that "all the tribes which by loss of sacred rites and the like have become outcasts from the pale of the four castes, whether they speak the language of the Mlechchhas or of the Aryas,

are called Dasyus." Here we have again the connecting link between the earlier and the later records and the natural explanation of the entire phenomena. As in Africa, at the present day, the tribes converted to Islám, leaving behind them their heathen practices, look with contempt and even hatred on their brethren in race who adhere to paganism, so the Aryas despised those of their race who remained content with the primitive belief which was once their common property and refused to accept the sacerdotal innovations, or who being of non-Aryan descent declined to accept the Brahmanical creed. The terms of abuse used towards these tribes by the priestly writers prove nothing more than the existence of the '*odium theologicum*' which has burned fiercely in all climes and countries from the earliest dawn of history to the present day. The preceding extracts show that even in the most orthodox writings the Khasas are looked on more as heretical members of the great Aryan family than as outcast aborigines, and that from a very early period they have been recognised as an important tribe in Upper India.

Allusions to Badari.

According to the Mahábhárata, Krishna visited the hermitage of Upamanyu in the Himálaya, where "the mongoose sports in a friendly fashion with snakes and tigers with deer." He also visited the Pándavas in their exile and is said to have himself, in company with Arjuna, lived a considerable time in Badari. Arjuna as Nara and Krishna as Náráyana "mounted on the chariot of righteousness, performed an undecaying penance on the mountain Gandhamádana." There they were visited by the sage Nárada, who "descended rapidly from the sky to the spacious Badari. There he saw the ancient gods, the two most excellent Rishis," and there he remained with them for a thousand years. Again it is said that the Chakravarti Rája Dambhodbhava, having an overweening conceit of his own prowess, visited Gandhamádana (Badari group of peaks) with his army and resolved to overthrow the Rishis. They tried to put him off by saying that they were divested of all earthly passions and lived in an atmosphere of peace. Dambhodbhava, however, resolved to attack them, when Nára took a handful of straws and scattering them to the winds so whitened the air and so filled the eyes, ears, and noses of the men of Dambhodbhava's army that they fell at Nara's feet and sued for peace: referring doubtless to a snow-storm encountered by the

invaders. In another part of the same record Krishna is thus addressed :—"Formerly Krishna, thou didst roam for ten thousand years on Gandhamádana, where the Muni Sáyangriha was. * * Thou didst stand on the spacious Badari, a hundred years with thy arms aloft, on one foot, subsisting on air, with thy outer garments thrown off, emaciated, with thy veins swollen." Badari is also called Siddhásrawa, 'the hermitage of the perfect', "where the illustrious Vishnu was perfected when performing a great act of austerity in the form of a dwarf, when the empire of the three worlds had been taken away from Indra by Bali." Tradition states that Ráma performed austerities at Rikhikes, and his brother Lachhman at Tapuban, in order to wipe away the sin of slaying Rávana. The grammarian Vararuchi also visited the Himálaya and by propitiating Mahádeva obtained from him the materials for his Pániniya grammar.[1] When near his death Vararuchi again retired to Badari, and "throwing off this mortal coil, resumed as Pushpadanta[2] his seat among the brilliant spirits of heaven." Gunádhya, brother of Pushpadanta, followed his example and worshipped 'the crescent-crested deity' in his mountain home. It was here, too, that Sahasráníka, rája of Kausambhi, when wearied with the toils of state, spent his declining years in solitude and devotion.[3]

Puránik period.

We now come to the Puránik period and find that the legends concerning the Himálaya have grown with the people, and that in the later development of Hindu mythology they occupy a much more important place. There is little doubt that the story of Mount Meru, the Olympus of the Indian gods, was suggested by the sight of the lofty summits of the Himálaya crowned with perpetual snow. In the geographical notices contained in the Puránas we have the traditional distribution of the countries and peoples then known to the compilers, and to their pages, amongst much that is puerile and absurd, we must look for the little further aid to our researches that can be derived from indigenous sources. Lassen[4] writes :—"It is true that

[1] Wilson, III., 174. [2] *Ibid.*, 184: Badari is mentioned in the Pádma Purána as one of the celebrated Vaishnava tírthas where bathing is particularly enjoined. Pushpadanta was born as Devadatta and from worshipping Mahádeo was through his favour united with Jaya, daughter of Raja Susarma, and retired in his old age to Badari. So also in the Vámana Purána the sacred character of the lings at Kedár and Badari is extolled: *Ibid.*, VI., lxxv. [3] *Ibid.*, III., 196. [4] Muir, II., 397.

we might be tempted to discover in the superior sacredness which they (the Aryas) ascribe to the north, a reference, unintelligible to themselves, to a closer connexion which they had formerly with the northern countries : for the abodes of most of the gods are placed to the north in and beyond the Himálaya and the holy and wonderful mountain of Meru is situated in the remotest regions in the sam direction. A more exact examination will, however, lead to the conviction that the conception to which we have referred has been developed in India itself and is to be derived from the peculiar character of the northern mountain-range. The daily prospect of the snowy summit of the Himálaya glittering far and wide over the plains and in the strictest sense insurmountable, and the knowledge which they had of the entirely different character of the table-land beyond, with its extensive and tranquil domains, its clear and cloudless sky and peculiar natural productions, would necessarily designate the north as the abode of the gods and the theatre of wonders ; while its holiness is explicable from the irresistible impression produced upon the mind by surrounding nature. Uttara Kuru, the Elysium in the remotest north, may be most properly regarded as an ideal picture, created by the imagination of a life of tranquil felicity, and not as a recollection of any early residence of the Kurus in the north. Such at least is true of the representation which we have of this country in the epic poems. It is, however, probable that originally, and as late as the Vaidik era, a recollection of this sort attached itself to that country, though in later times no trace of it has been preserved."

Discovery of Kailás.

It is not difficult, therefore, to picture the Aryan immigrants arriving at the Ganges and sending some adventurous spirits to explore its sources. After traversing the difficult passes across the snowy range and the inclement table-land of Tibet, they discovered the group of mountains called Kailás[1] and the lakes from which flowed forth the great rivers to water and give life to the whole earth. The rugged grandeur of the scene, the awful solitude and the trials and dangers of the way itself naturally suggested to an imaginative and simple people that they had at length rediscovered the golden land,[2] the

[1] The name Kailás seems to be of Tibetan origin which would apparently show that the Hindus discovered the country around Mánasarovar after it had already been occupied by a Tibetan race. [2] Hiran maya, Suvarna-bhúmi.

true homes of their gods whom they had worshipped when appearing under milder forms as storm and fire and rain in the plains below. In the course of time, Brahmanical innovations caused the worship of Agni, Váyu or Indra, Súrya and the other Vaidik gods to give place to a system where the intervention of a sacerdotal caste between the worshipper and his creator was essential. The transfer to thenew system of the localities already held sacred soon followed, and Brahma, Vishnu, and Siva, the triad of the new revelation, took possession of the Himálaya. In place of domestic worship offered by individuals for individual good and addressed to unreal presences, a highly ornate ritual was introduced administered by a consecrated class and addressed to visible types. It is in this later stage that we find Hinduism as described in the Puránas, so late indeed that the worship of Brahma had already almost become obsolete. In the Vedas,[1] "the one universal Being is of a higher order than a personification of attributes or elements and however imperfectly conceived, or unworthily described is God. In the Puránas, the only Supreme Being is supposed to be manifest in the person of Siva or Vishnu either in the way of illusion or in sport; and one or other of these divinities is therefore also the cause of all that is,—is, himself, all that exists." The Puránas exhibit a sectarial fervour and exclusiveness not found in the Ramáyana and only to a qualified extent in the Mahábhárata. "They are no longer," says Professor Wilson, "authorities for the Hindu belief as a whole; they are special guides for separate and, sometimes, conflicting branches of it; compiled for the evident purpose of promoting preferential or, in some cases, the sole worship of Vishnu or Siva."

The Puránas.

Before proceeding further with our subject, it will be convenient succinctly to describe here the Puránas which form the class of writings that give us the greatest details concerning the Himálaya. There are eighteen Puránas compiled at various times by different hands.[2] The Vishnu Purána which has been translated by Professor H. H. Wilson and edited by Dr. F. Hall is the principal and next to the Bhágavata

[1] Wilson's Works, VI., xiii: Gazetteer, II., 61. [2] They are the (1) Bráhma, (2) Pádma, (3) Vaishnava, (4) Shaiva, (5) Bhágavata, (6) Náradíya, (7) Márkandeya, (8) Agneya, (9) Bhavishya, (10) Brahma Vaivarta, (11) Lainga, (12) Váráha, (13) Skánda, (14) Vámana, (15) Kaurma, (16) Mátsya, (17) Gáruda, and (18) Brahmánda.

is still regarded as the great authority on matters connected with their religion by large sections of the Hindu community. Both are compiled in the form of a dialogue in which some person relates the contents in reply to the inquiries of another. In the extracts hereafter given from the Skánda Purána, the narrator is Súta,[1] or properly 'a Súta' (*i.e.*, a bard or panegyrist and pupil of Vyása, the generic name for a compiler or editor). Each Purána is divided into *khandas* or books, which are again subdivided into chapters which often consist of *máhátmyas* or collections of local legends like the Mánasa-khanda and Kedára-khanda of the Skánda Purána noticed hereafter. Regarding this latter work, Professor Wilson writes :—"It is uniformly agreed that the Skánda Purána, in a collective form, has no existence and the fragments in the shape of *samhitas*, *khandas* and *máhátmyas*, which are affirmed in various parts of India to be portions of the Purána, present a much more formidable mass of stanzas than even the immense number (81,100) of which it is said to consist." The more celebrated of these portions are the Káshi-khanda, giving a description of Benares, and the Utkala-khanda, giving an account of the holy places in Orissa. Besides these there are a Himavat-khanda devoted to Nepál, a Rewa-khanda, a Brahmottara-khanda and others. There are also several separate *samhitas* or collections. The *máhátmyas* are, however, the most numerous, and even Colonel Vans Kennedy thinks that they "have rather a questionable appearance." Many of the *khandas*, such as the Káshi-khanda, are quite as local as the *máhátmyas*, "being legendary stories relating to the erection of certain temples, or groups of temples and to certain *lings;* the interested origin of which renders them, very reasonably, objects of suspicion." Professor Wilson adds :—"In the present state of our acquaintance with the reputed portions of the Skánda Purána, my own views of their authenticity are so opposed to those entertained by Colonel Vans Kennedy, that instead of admitting all the *samhitas* and *khandas* to be genuine, I doubt if any one of them was ever a part of the Skánda Purána." * * "There are in all parts of India various compilations ascribed to the Puránas which never formed any portion of their contents and which, although offering, sometimes, useful local information and valuable as preserving local

[1] Wilson's Works, VI., xviii.

popular traditions, are not, in justice, to be confounded with the Puránas so as to cause them to be charged with even more serious errors and anachronisms than those of which they are guilty." The Skánda and Brahmánda[1] Puránas are those to which the majority of the modern fabrications have been attributed by their authors who have "grafted personages and fictions of their own invention on a few hints from older authorities." They retain the form of the genuine Purána, the dialogue and many of the stories giving them the local colouring necessary for the particular object in view. "Still," as I have elsewhere said,[2] "imperfect as they are, and disfigured by absurd stories and interpolations of later times, the Puránas with the great epic poems, are the chief amongst the few historical records we possess of any antiquity to assist us in compiling an account of the heroic age."

The fashioning of the earth.

We shall now briefly refer to the geography of the Puránas which commences with the chapter on cosmogony and is here closely connected with the geography of northern Kumaon and the adjoining part of Tibet. One account of the creation of the earth relates how Vishnu, in his boar incarnation, supported the earth on his tusks[3] as it was about to sink into the waters and then fixed it on the thousand heads of the king Ananta; whilst another likens the earth to a lotus, the stalk of which springs from the navel of Vishnu as he lies asleep at the bottom of the ocean. The world was then in chaos and Brahma arose and formed the seven great island continents :—Jambu, Plaksha, Sálmali, Kusa, Krauncha, Sáka, and Pushkara, separated from each other by the seas.[4] Jambu-dwípa is again divided into nine *varshas* or regions and in the centre of all is the glorious mountain of Meru, of various colours :[5] on the east it is white like a Brahman ; on the south it is yellow like a Vaisya ; on the north it is red like the dawning morn or a Kshattriya, and on the west it is dark.

[1] Colonel Wilford in exposing the forgeries of his own pandit who had fabricated a *khanda* for each of these Puránas calls the Skánda, Brahmánda and Pádma Puránas the "*Puránas of thieves and impostors.*" As. Res., VIII., 252. [2] Gazetteer, II., 61. [3] Compare Ward, I., 3; Wilson, VI., 39. To the present day the local theory regarding earthquakes is that they are due to Vishnu changing his burthen from one tusk to another. [4] It is said that all the islands except Jambu have perished. Between Jambu and Plaksha is the salt sea; between the latter and Sálmali, a sea of sugarcane juice and then a sea of wine, of clarified butter, of curds, of milk and of fresh water. [5] Compare the existing Tibetan appellations :—*Gya-nak*, the great black or China ; *Gya-gar*, the great white or India; and *Gya-ser*, the great yellow or Russia.

like the dry leaves or a Sudra. Meru is circular in shape and forms the germ of the lotus.[1] It stands on the most elevated portion of the central division of Jambu known as Ilávrita. South of Meru the Nishadha mountains separate Ilávrita from Harivarsha; south of the latter, the Hemakúta divides it from Kimpurusha, and further south the third or Himavat range forms the boundary between Kimpurusha and Bhárata. Similarly three ranges of mountains form the boundaries of countries on the north. First come the Níla range between Ilávrita and Ramyaka on the north; then the Sweta mountains bordering the country of Hiranmaya where there is much gold; and again the Sringin range separating Hiranmaya from the country of the Uttara Kurus. All these names would lead us to believe that the writers had the country to the north of the Kashmír valley in view, though the names subsequently mentioned are clearly connected with upper Garhwál and Kumaon. To the east of Ilávrita lies the country of Bhadrásva and to the west the country of Ketumála. Four mountains form buttresses to Meru: on the east is Mandara; on the south Gandhamádana or Merumandara; on the west Vipula or Kumuda, and on the north Supárswa. On each of these stands severally a *kadam*-tree (*Anthocephalus cadamba*), a *jambu*-tree (*Eugenia Jambolana*), a *pipal*-tree (*Ficus religiosa*), and a *nyagrodha*-tree (*Ficus indica*). There are also four great forests and four great lakes,[2] the waters of which are partaken of by the gods and which are called Arunoda, Mahábhadra, Asitoda, and Mánasa. The last is the Mána-sarovara of the

[1] In the shape like an inverted cone. [2] For a long description of each lake from the Váyu Purána see Wilford in As. Res., VIII., 326. According to him the Puránas place a great lake called Bindu-sarovara to the north of Mána-sarovara, and but for its distance it might be identified with the Ráwan Hrad or Rákhas Tál, the Cho Lagan of the Tibetans which adjoins and is connected with Cho Mápán. On the Chinese map of India O-neou-tchi is given as the name of lake Mána and the Gangri range has the same name. In the Ceylonese books it is called Anotatte. The Arunoda lake or 'lake of the dawn,' which is said to lie east of Mána, may be the Cho Konkyu or Gungyut-cho, smaller but similar to the others, which lies near the source of the Brahmaputra. To the west of Mána is the Sitoda lake, from which issues the Apara Gandaki or 'western Gandak,' identified by Wilford with the Chakshu or Oxus: so that this lake must be the lake of the Pámír, but is more probably the Cho Moriri, the source of the western Satlaj. The Mahábhadra lake in the north may be identified with one of the lakes of the table-land. There appears to be a mingling of facts true of the country to the north of Kashmír with facts true of the country north of Kumaon in these accounts. In some Meru clearly indicates the group of mountains to the north and west of Kashmír, and in others those in the neighbourhood of lake Mána.

Hindus and Cho Mápán of the Tibetans, of which more hereafter.

Boundaries of Meru.

Meru in its widest sense embraces the elevated table-land of western Tibet between Kailás on the east and the Muztágh range on the west and between the Himavat on the south and the Kuen-luen range on the north. "It lies between them like the pericarp of a lotus and the countries of Bhárata, Ketumála Bhadráswa, and Uttara Kuru lie beyond them like the leaves of a lotus." In the valleys of these mountains are the favourite resorts of the Siddhas and Cháranas and along their slopes are agreeable forests and pleasant cities peopled by celestial spirits, whilst the Gandharvas, Yakshas, Rákshasas, Daityas, and Dánavas pursue their pastimes in the vales. "There, in short, are the regions of Swarga (Paradise), the seats of the righteous and where the wicked do not arrive even after a hundred births, * * there is no sorrow, nor weariness, nor anxiety, nor hunger, nor apprehension; the inhabitants are exempt from all infirmity and pain and live in uninterrupted enjoyment for ten or twelve thousand years. Devi never sends rain upon them, for the earth abounds with water. In those places there is no distinction or any succession of ages." This account agrees well with Homer's description[1] of Olympus in the Odyssey, vi., 42 :—

"Olympus, where they say the blessed gods
Repose for ever in secure abodes:
No stormy blasts athwart those summits sweep,
No showers or snows bedew the sacred steep;
But cloudless skies serene above are spread
And golden radiance plays around its head."

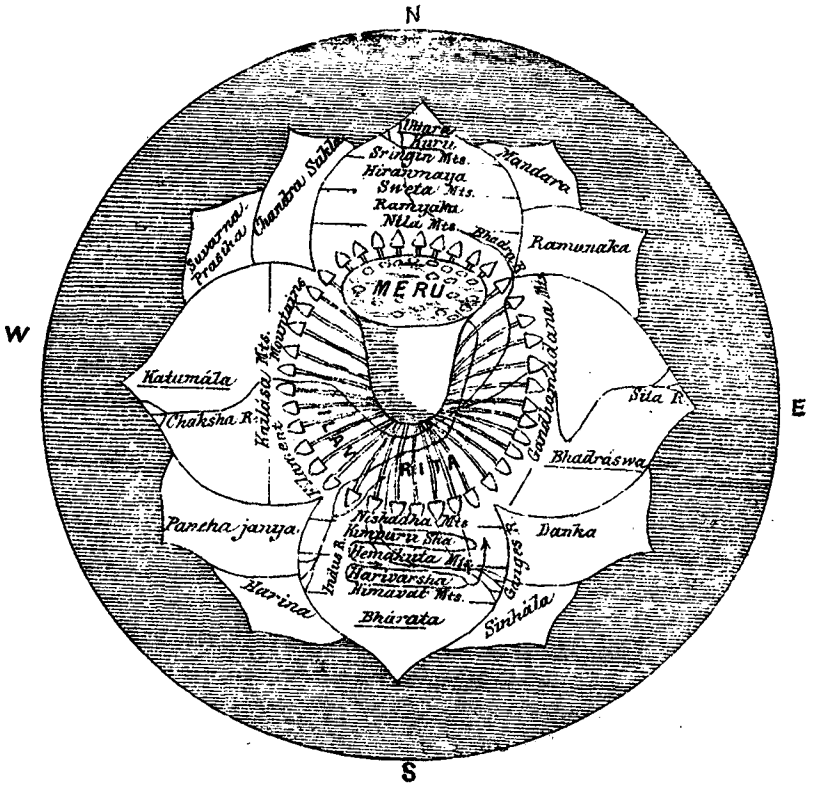
The accompanying figure[2] represents the worldly lotus floating upon the waters of the ocean which is surrounded by the Suvarnabhúmi or land of gold and the mountains of the Lokalokas and is in

[1] Quoted by Muir, II., 480. The same idea is familar to us in the Scotch song, the 'Land o' the Leal':—

"There's nae sorrow there, Jean;
There's neither cauld nor care, Jean,
The day is aye fair I' the land o' the Leal."

[2] After Wilford: As. Res., VIII., 376.

accordance with the theory expressed in the Bhágavata and Brahmánda Puránas :—



On the summit of Meru is the city of Brahma and, like filaments from the root of the lotus, numerous mountains project from its base. Within Meru is adorned "with the self-moving care of the gods, all beautiful : in its petals are the abodes of the gods, like heaven : in its petals, I say, they dwell with their consorts. There reside above Brahma, god of gods, with four faces ; the greatest of those who know the Vedas, the greatest of the great gods also of the inferior ones. There is the court of Brahma, consisting of the whole earth, of all those who grant the object of our wishes ; thousands of great gods are in this beautiful court : there dwell the Brahmarishis." All round are the cities of the Lokapálas or guardians of the eight regions. To the

Meru.

east, Indra sitting upon a *vimána*, resplendent like a thousand suns; in the second interval between east and south is Agni or Jivani, from whom sprang the Vedas. In succession comes Vaivaswata-Yáma called by mankind Su-Sanyáma, Virupaksha, Varuna also called Subhávati, Váyu called Gandhávati, Mahodaya and Isána. According to the Vishnu Purána, the city of Brahma is enclosed by the Ganges, which, issuing from the foot of Vishnu and washing the lunar orb, falls here from the skies and after encircling the city divides into four mighty rivers flowing in opposite directions. These rivers[1] are the Síta, which passes through the country of Bhadráswa; the Alaknanda, which flows south to Bhárata; the Chakshu, which traverses Ketumála, and the Bhadra, which washes the country of the Uttara Kurus. Other Puránas describe the detention of the Ganges in the tresses of Síva until set free by king Bhagirath and escaping thence formed seven streams :—the Nalini, Hládini, and Pávani going east; the Chakshu, Síta, and Sindhu going west; and the Bhágirathi going south. The Síta is supposed to flow from an elephant's head, the Alaknanda from a cow's head, the Chakshu from a horse's head, and the Bhadra from a lion's head, and they are so represented on the Chinese map compiled in the fifteenth century to illustrate the travels of Chinese pilgrims in India which will be found in the pocket to this volume. Wilson[2] would identify the Bhadra with the Obi, the Síta with the Hoang-ho, the Alaknanda with the Ganges, and the Chakshu with the Oxus, and this may be what is intended, for according to Chinese accounts, the Síta or Yarkand river, which flows into Lob-nor, is supposed to have an underground connection with the swamps near Kokonor, which form the head-waters of the Hoang-ho.[3] As a matter of fact the local traditions identify the Bhadra with the Indus or 'lion-river,' the *Sing-chin-kamba* (or *khampa*) of the Tibetans[4] on the north; the

[1] Here clearly in order the Hoang-ho, Alaknanda, Oxus, and Indus. [2] VII., 122, 172. [3] Klaproth, Méln., Zol. Asie., II., 411. [4] Herbert obtained the same Tibetan names in 1819, As. Res., XV. In the great Chinese map prepared by order of Khian-loung, the four corners or gates of the Mána lake are called the lion, elephant, horse and ox gates: *Toui-gochal* on the east, *Ghiou ourgou* on the south, *Arabko* on the west and *Dadza-loung* on the north. The Pandit explorers give the names *Singh-gi-chu* or *Singh-gi-khamba* or *Singh-gi-kha* to the Indus: *Langjan-khamba* to the Satlaj: *Tamjan-khamba* to the Brahmaputra and *Madju-khamba* to the Karnáli. Moorcroft (I., 417), in 1821, calls the Indus at Le the *Sink-kha-bab*, and again (*Ibid*, 261) writes:—"The great eastern branch of the Indus or, as termed in the country, the *Sink-kha-bab*, the river that rises from the lion's mouth in reference to the Tibetan notion, borrowed perhaps from the Hindús, of the origin of four great rivers from the mouths of as many

Chakshu with the Brahmaputra or 'horse-river,' the *Tamjyak-kamba* of the Tibetans on the east; the Alaknanda with the Satadru or Satlaj or 'bull-river,' the *Lang-chin-kamba* of the Tibetans on the west, whilst the fourth river is the Karnáli or *Mapchu-kamba* or 'peacock-river' on the south. All these rivers take their rise in the Mána and Rákhas lakes or in the mountains near them known as Kailása by the Hindus.

A volume might be written on Meru alone, but we must return to our geographical investigations and first to the sub-divisions of the island-continent Jambu. It was Agnidhra who, according to the Vishnu Puráná, divided Jambu into nine portions amongst his nine sons—Nábhi, Kimpurusha, Harivarsha, Ilávrita, Ramya, Hiranvat, Kuru, Bhadrásva, and Ketumála. Nábhi received the country called Hima south of the Himavat mountains and was blessed with a son named Rishabha, whose eldest son was Bharata, after whom the country was named Bhárata. This is the name therefore of the country to the north of the salt sea and south of the snowy mountains which is described as again divided into nine subordinate portions, *viz.*,—Indra-dwípa, Kaserumat, Támravarna, Gabhastimat, Nága-dwípa, Saumya, Gándharva, and Váruna and the ninth unnamed.[1] It has seven main chains of mountains:—Mahendra (in Orissa); Malaya (southern portion of western ghâts); Sahya (northern portion of the western ghâts); Suktimat; Riksha (in Gondwána); Vindhya and Páripátra (northern and western Vindhyas). Amongst the rivers mention is made of the Satadru (Satlaj) and Chandrabhága (Chinâb) as flowing from the Himavat. The Váyu

animals: as the Indus from the lion's mouth; the Ganges, *Mab-cha-kha-bab*, from that of the peacock; the Satlaj, *Lang-chin-kha-bab*, from that of the elephant, and the *Ster-chuk-kha-bab* or river of Tibet from the mouth of the horse." Gerard (p. 23) calls the Satlaj the *Lang-zhing-choo* or *Langhing kampa*; the Indus, the *Singhechoo* or *Singzhingchoo* or *Singzing kamper*; and the Brahmaputra, the *Tamjco*, *Damchoo* or *Erechumbo*. He identifies the Tamjoo with the Tzango or Tzancire of Georgi and the Damchoo with Turner's river *Erichomboo* at Tashi-Lhunpo. Lieutenant J. D. Cunningham (Notes, p. 63) gives the names as follows: the Indus, *Singchin kabab* (or *kampa*); the Satlaj. *Langchin kabab*; the Gogra (Karnáli), *Mamchin kabab*; and the Berampooter (Brahmaputra), *Tacho* or *Tawjood kabab*. Captain H. Strachey (1854) gives the Tibetan names most correctly thus:—*rTachok-Tsangspo* or horse-river (Brahmaputra); *Senge-Tsangspo* or lion-river (Indus); *Langchen-Tsangspo* or elephant river (Satlaj) and *Mapcha-Tsangspo* or peacock-river (Karnáli). *Sing* or *sinh* is lion; *lang* is bull (not elephant: elephant in Tibetan is 'great bull'); *mam* is peacock; '*ta*' is horse; *chin* is great '*ka*' means 'mouth' and '*bab*' means "issuing from": so *kamba* is a corruption of '*kabab*' with the affix '*pa*' (*kababpa*).

[1] This unnamed portion is called Kumárika in the Prabhása and Rewa Khanda and by Bháskara Achárya and represents India as the Ganges is said to flow through it.

Purána adds a number of inferior mountains and gives the following as the rivers of Himavat :—Ganga, Sindhu, Sarasvati, Satadru (Satlaj), Chandrabhága (Chínáb), Yamuna (Jumna), Sarayu (Sarju), Airavati (Ravi), Vitasta (Jhelam), Vipása (Biás), Devika (Ghágra), Kuhu, Gomati (Gumti), Dhutpápa, (old junction of Kaggar and Satlaj), Báhuda, Drishadvati (Kaggar), Kausiki (Kosi), Vritiya, Nirvira, Gandaki (Gandak), Ikshu (affluent of the Brahmaputra), and Lohita (ditto).

Local geography in the Brahmánda Purána.

In the Brahmánda and Váyu Puránas we have favorable examples of a more local and detailed geographical description and are able to identify many of the places referred to. It will, however, be only necessary to give the text of a portion as an example. The first extract is from Wilford's translation of the Brahmánda Purána, in which the following account of the streams that flow from Meru is given :—

"The water of the ocean coming from heaven upon Meru is like *amrita*, and from it arises a river which through seven channels encircles Meru for a space of eighty-four yojanas and then divides into four streams springing over the four sacred hills towards the four cardinal points. One stream goes over Mandara in the east and encircles the beautiful grove of Chaitraratha and falls into the Arunoda lake and goes thence to the mountains of Sitanta,[1] Sumanta, Sumanjasa, Máddyavanta to Vaikanka, Mani, Rishabha, from hill to hill. It then falls to the ground and waters the country of Bhadrásva, a beautiful and extensive island, and then it joins the eastern ocean near the Purva-dwípa or eastern island. The southern branch goes to Gandhamádana[2] from hill to hill and from stone to stone. It encircles the forest of Gandhamádana, or Deva-nandana, where it is called the Alakananda.[3] It goes to the northern lake called Mánasa, thence to the king of mountains with three summits, thence to the mountains of Kalinga, Ruchaka, Nishadha, Tamrábha,[4] Swetodara, Kumula, 'another king of hills' Vasudhára,[5] Hemakúta, Devasringa, the great mountain Pisáchaka, the five-peaked Panchakúta ;[6] thence to Kailása and the Himavat, and then this very propitious stream falls into the southern ocean. Mahádeva received it on his own head from which, spreading all over his body, its waters are become most efficacious. It falls then on Himáchal, from which it goes over the earth : hence its name Ganga. To the west (*apara*) is a large river encircling the forests of Vaibhrája. It is most propitious and falls into the lake Sitoda. Thence it goes to the Subaksha mountains and to the Purnoda lake, to the mountains called Sikhi, Kanka-vaidúrya, Kapila-Gandhamádana, Pinjara, Kumuda-madhumánta,

[1] The range near the confluence of the Chandra and the Bhága. [2] The Badari group in upper Garhwál. [3] Flows through the Niti valley. [4] Copper mines, of which there are many. [5] There is a stream and fountain of this name near Badarináth. [6] The Panchachuli group : the great mountain with these summits will be Triśúl. I take it that nearly all these allusions refer to the Kumaon Himálaya and are local.

Anjana, Mukúta-krishna, Sweta filled with large snakes, to the thousand-peaked mountain, the Párijáta mountain, through Ketumála, a large country, and then falls into the western ocean. North from Meru there falls a branch called Bhadra and Bhadrá-soma upon Suparsva of gold, which it encircles and goes to the lake called Sitodaka in the forest of Bhadrá-soma. Thence to the mountains of Sankha-kúta, Vrisha-vatsa, Níla, Kapinjala, Indraníla, Mahánila, Hemasringa, Swetasringa, Sunága, the mount with a hundred peaks, Pushkara, Durja-rája, Varáha, Mayúra and Játudhi. After eroding a thousand lesser hills it goes to the three-peaked mountain called Visbuddha and then into the northern country to the Gandhamádana. Along the banks of the Apara-Gandika or western Gandak is the country of Ketumála, renowned for men mighty in deeds, strong and powerful, and for women bright as the lotus, whom to see is to love. There is the great *panasa* tree[1] and there resides Iswara.[2] The eastern Gandak is in Bhadráswa."

Váyu Purána.

In the Bráhma Purána it is said that Vishnu resides in Bhadráswa with the countenance and the head of a horse: in Bhárata with the head of a tortoise (*kurma*): in Ketu-mála with the head of a boar (*varáha*): and in Kuru with the head of a fish (*matsya*). The Váyu Purána describes the country to the west of Meru as containing numerous valleys divided by ranges of hills.

About the mountains of Subaksha and Sikhisaila is a level country about a hundred yojanas in extent and there the ground emits flames.[3] There is Vibhávasu or Vasu simply who presides over the fire burning without fuel. Within the mountain is the Mátu-linga, ten yojanas broad, and there is the hermitage of Vrihaspati. Like these two mountains the Kumuda and Anjana (black) ranges also enclose a valley between them.[4] Between the great mountains Krishna and Pándura is a level country enclosing a valley abounding with the lotus called Ananta-sada.[5] Between Sanku-kúta and the Vrishabha mountains is the Parushaka country, the abode of Kinnaras, Uragas, Nágas, and holy men. Between Kapinjala and Nága-saila is a tract adorned with many groves. It abounds with fruits and flowers. The Kinnaras and Uragas with tribes of pious and good men live there. There are beautiful groves of *drákshá* (vine), *nágaranga* (orange) and *badari* (stone-fruit) trees. The portion lying between the Pushpaka and Mahámegha mountains is as flat as the palm of the hand, devoid of trees and with very little water which is whitish. The soil is hard and tenacious and even

[1] As. Res., VIII., 354. The jack-tree, which does not grow in the hills; but neither does the *badari* or *jujube grow* near Badarináth, which is said in many descriptions to possess a tree of surpassing size and assigned to various species, *pipal*, *bargad*, *badari*, and here the jack.' [2] Vishnu as Iswara. [3] Can only refer to Jwála-mukhi in the Kangra valley, with its celebrated Saiva shrine. [4] Some connect the Kumuda mountains with the Comedii of Ptolemy, and if so with the Kashkára valley. In the Brahmánda Purána, the country of Kusa is said to contain the Kumuda mountains and is hence also known as the Kumuda-dwípa. It contained the Kumudvati river, probably the Kunar river, and amongst its inhabitants were the Sakas and Párasikas and Syámakas, *i. e.*, the Indo-Skythic rulers of Kipin, Persians and the Siyálas. [5] The valley of Kashmír is still locally assigned to a Nágá race.

without grass. There are few animals and the few inhabitants have no fixed habitation. The whole country is called Kánan or Kánana.[1] There are several large lakes, likewise great trees and larger groves called Kánta. There are caves here in the mountains most dreary and dark, inaccessible to the rays of the sun, cold and difficult of access. In this country are Siddhas or prophets with the gift of miracles and learned and famous Brahmans. The next mountains are those of the Sitánta range, many yojanas in extent, abounding with all sorts of metals and gems. It is skirted by a most delightful country, well-watered and enlivened with the harmonious noise of the black bee and frogs. There are towns with gates and the refreshing moisture of this country proceeds from Urupa and reuniting together forms a stream called the Váha of the moon or Chandraváha.[2] There amongts immense caves is Krídávana and the great forest of the Párijáta tree of the kings of the gods.[3] There live the Siddhas and Yakshas in caves. To the east is the Kumuda peak with the eight towns of the proud Dánavas. Again in the many-peaked mountains of Vajraka live strong and terrible Rákshasas who are also called Nílakas. In Mahaníla are fifteen towns of the Hayánanas or Asvamukhas, the horse-faced. They were originally Kinnaras courageous like Kárttikeya. There are fifteen chiefs of the Kinnaras elated with pride, and in caves below the ground abide people like snakes who live upon the golden stamens of certain flowers. In the hills above are a thousand abodes of the Daityas; the houses are elegant like high-embattled forts.[4] In Venumat are three forts belonging to the Romakas, Ulukas and Mahánetras, three principal tribes of the Vidyádharas whose mighty deeds equal those of Indra.[5]

On Vaikanka reside the offspring of Garuda, the destroyer of serpents: it abounds with precious metals and precious stones. A strong wind swiftly passes over this mountain, in a human form, called Sugríva. The offspring of Garuda in the shape of birds fly about this mountain: they are strong, fly quickly and mighty are their achievements.[6] On Karaja always resides the mighty lord of living beings, riding upon a bull: hence called Vrishabhánka Sankara, the chief of Yogis. The inhabitants like Mahádeva always carry poison about them: they are Pramathas and difficult of access. Mahádeva resides there amongst them. On Vasudhára in Vasumati are the *sthánas* or places of the eight forms of Mahádeva. They are full of splendour and proper places of worship. There are seven places of Siddhas and the place of Brahma of the

[1] This can be no other than Bisahr, including Kunáor, the Kunu of the Tibetans and still celebrated for its vines, oranges and apricots. The inhabitants were called Kinnaras, *hodie* Kunets. [2] The Chandra and the Bhága, which unite to form the Chandrabhága. [3] The noble forests of deodárs which form such a feature of this part of the country. [4] This may refer to the strikingly tower-like structures in the upper valleys towards Balti and Ladák. [5] From the Vishnu Purána (Hall's Wilson's V. P., II., 196) we learn that Venumat was son of Jyotishmat, king of Kusa, the Hindu-kush country which was bounded by the Saka country. The name Vidyádhara or 'magical-knowledge holder' seems to be a name applied to many of the hill-tribes who were supposed to be possessed of magical powers. It is especially noted as a character of the people of the Swát valley, and the Romakas may possibly be represented by the 'Rum' branch of the Káfirs. The Nílakas inhabited Kashmir. [6] Elsewhere this land is called Deva-kúta peopled by men as well as birds and lies in the Dwípa Sálmali. One tribe of these Gandharvas was called Agneyas, servants of Kuvera, whose principal employment was to explore the bowels of the earth in search of wealth. Can these be the Aguri-caste of miners so well known in these hills?

four faces, the mighty lord of created things, on a high peak to which all living creatures bow. The eleven Rudras reside there on the Gaja-saila. Sumegha, the mount of the beautiful cloud, is full of minerals, with caves in its bosom and groves along its skirts. Here dwell the twelve Adityas and the eight forms of Rudra, also Vishnu, the Asvins and the good and perfect who are continually worshipped by the Yakshas, Gandharvas and Kinnaras with their king Kapinjala. On the five-peaked Anala, reside Rákshasas with Dánavas haughty, foes of the gods, great, strong and of mighty deeds. On Satasringa or the hundred-peaked range reside the benevolent Yakshas and on Tamrábha is a town inhabited by the children of the snake race; Kádruveyas and Tákshakas. In the beautiful Visákacha are many caves and the famous abode of the god Kárttikeya. A town and settlement of the beneficent Sunábha, son of Garuda, occurs on Swetodara. On the Paisáchaka mountain is a settlement of the Kuveras with a great palace to which the Yakshas and Gandharvas resort. Kinnaras reside on Kumuda; Mahánágas on Anjana; the towns and white houses of the Gandharvas are seen on Krishna and on Sweta or Pándura, the battlemented town of Vidyádharas Daityas and Dánavas reside on the range with a thousand peaks. On Sukúta reside the chiefs of the Pannágas; on Pushpaka many tribes of sages; on Supaksha or Subaksha are the mansions of Vaivaswata, Soma, Váyu and Nágrája, and there the Gandharvas, Kinnaras, Yakshas, Nágas and Vidyádharas worship their favourite deity.

Mánasa-khanda.

From these statements we learn that the hill tribes to the west of Kumaon were Kinnaras, the ancestors of the Kunets of the present day and Yakshas or Khasas, that there were Nágas in Kashmír and Vidyádharas in the Swát valley, as well as Siddhas, Gandharvas, Dánavas and Daityas, names applied to various hill tribes, or perhaps more correctly to sections of those tribes following certain avocations. The name Vidyádhara is commonly applied to the people of the Kusadwípa, which is to be identified with the mountainous tract between the Indus and the Hindu-kush and which was bounded externally by Saka-dwípa, which may be assigned to Kipin or the Kábul valley occupied by Sakas in the first century before Christ. Through Sir John Strachey we are enabled to give a paraphrase of a portion of the section of the Skánda-Purána known as the Mánasa-khanda. It occurs in the usual form of a dialogue between Súta, a pupil of Vyása, and Janamejaya, the son of Parikshit, the Pándava ruler of Hastinapur, and professes to relate what was formerly communicated by Vyása to Vasishtha. In form and often in verbiage it follows the model of the older Puránas and minutely describes the country from the lake Mánasarowar in Tibet to Nanda Devi and thence along the course of the Pindár river to Karnprayág.

From this point the narrative touches the Dhanpur range and thence to the Rámganga and Kosi as far as the plains. Then along the foot of the hills to the Káli, which it follows northwards, winding up in the hills a little to the east of the Karnáli. Notes are given explaining all the allusions and identifying most of the places mentioned. The writers have transferred many of the names of rivers celebrated elsewhere to comparatively unimportant streams in the vicinity of celebrated *tírthas*, and these have in many cases been forgotten or have existed merely as literary fictions known only to the educated few: hence one of the main difficulties in identifying the names given here. The work itself is very popular and is deeply interesting as showing the form in which the actual living belief of the people is exhibited.

MÁNASA-KHANDA.

Introduction.

Creation of the world.

Janamejaya addresses the Súta[1] and says that he has received an account of all other matters, but desires to hear of the creation of the world and its state subsequent to that event and the *máhátmyas* of the great *tírthas*.[2] Súta, in reply, relates that when Brahma formed the desire that the universe should be created, he instantly assumed the visible form of Vishnu.[3] The whole universe was covered with water on which Vishnu floated sleeping on a bed which rested on the serpent Seshnág (or Ananta). From his navel sprang a lotus from which issued Brahma; from his ears sprang the two Daityas, Madhu and Kaitabha,[4] who attacked Brahma. Then Brahma demanded help from Vishnu, and Vishnu fought with the Daityas for five thousand years. Then the great illusion (*Mahámáya*), the supreme will or desire of Vishnu, made the Daityas submit, and they told

[1] See page . [2] Places of pilgrimage. [3] For a more detailed account of the creation according to Hindu writers, see Muir's Works, IV., and Wilson, VI. [4] In the Mahábhárata we read that when Brahma sprang from the lotus produced from the navel of Vishnu, "two horrible Dánavas, Madhu and Kaitabha, were ready to slay him. From the forehead of Hari, who became incensed when he saw their transgression, was produced Sambhu (Mahádeo), wielding the trident and three-eyed." In the *Devimáhátmya* of the Márkandeya Purána, Durga is identified with the Mahámáya of the story in the text: Muir, IV., 230, 435. Madhu is said to have given his name to Mathura (Muttra), formerly called Madhupura, and his son Lavana was conquered there by Satrughna. The derivation of the name Mathura from '*math*,' a convent, is, however, also advocated.

Vishnu that they admired his power and would obey whatever orders he gave them. His order was that they should die by his hand, and he then killed them with the *chakra* called Sudarshana.[1] From the marrow (*meda*) of these Daityas was formed the world. Then Vishnu, in the shape of a tortoise, placed himself to support the earth and raised it out of the water.[2] Then Vishnu desired Brahma to create all that the world was to contain.

Creation.

Brahma first created the three spheres of the earth, the sky, and the heaven; then he divided the earth into nine portions (*khandas*) and created wind and sound and time, past, present, and future, and work (*karm*) and desire and anger; then he created seven Rishis,[3] and from anger he created Rudra. Thus were formed the three great deities: the duty of Brahma being to create, of Vishnu to preserve, and of Rudra or Siva to destroy. These are the three *gunas* or qualities. Kasyapa was the son of Maríchi, one of the Rishis, and from his thirteen wives[4] were born the Adityas,[5] Dánavas,[6] Daityas,[7] Yakshas,[8] Rákhasas,[9] Apsaras,[10]

[1] 'Beautiful,' the discus of Vishnu or Krishna. [2] In his Kurma or tortoise *avatár*. [3] The seven great Rishis in the constellation Ursa Major:—Maríchi, Atri, Angiras, Pulastya, Pulaha, Kratu, and Vasishtha. [4] All daughters of Daksha. By (1) Aditi, Kasyapa had the twelve Adityas, a class of gods; (2) by Diti, the Daiteyas or Daityas; (3) by Danu, the Dánavas: (4) by Avishta, the Gandharvas; (5) by Surasa, a thousand winged serpents or dragons; (6) by Khasa, the Yakshas and Rákshasas; (7) by Surabhi, cows and buffaloes; (8) by Vinata, Garuda or Suparna, king of the birds and enemy of the serpent race and Aruna; (9) by Támra, six daughters; (10) by Kadru, mighty, many-headed serpents, such as Sesha, Vásukí, Takshaka, Sankha, Sweta, Nága, Karkotaka, Dhananjaya, Kapila, Náhusha, Mani, &c.; (11) by Krodharasa, all wild animals (*danshtrin* or sharp-toothed), Bhútas or goblins and Pisáchas; (12) by Ira, the vegetable kingdom; and (13) by Muni, the Apsaras. All these names are connected with pre-Aryan tribes. [5] The Adityas were the assistants of the creator regenerated in the present Manwantara as the twelve Adityas named:—Vishnu, Sakra, Aryaman, Dhátri, Twashtri, Púshan, Vivaswat, Savitri, Mitra, Varuna, Ansa and Bhaga. [6] The Dánavas or descendants of Danu number amongst them Dwimúrdhan, Hayagriva, Puloman, Ekachakra, Táraka, Sankara, Hayamukha, Ketu, Kálanábha, Ráhu, the Kálakanjas and Paulomas, all names of note amongst the enemies of the gods. [7] The Daityas were also enemies of the gods and descendants of Diti, whose two sons were Hiranyakasipu and Hiranyáksha. From the former came Anuhláda, Hláda, Prahláda and Sanhláda, and amongst their descendants were Táraka, Virochana and Bali. [8] A race like the Guhyakas, attendant on Kuvera, the god of mines. Elsewhere (V. P.) said to be produced by Brahma as beings emaciate with hunger, of hideous aspect and with long beards, and that crying out for food they were called Yakshas (from '*jaksh*,' 'to eat'). By the Buddhists they are sometimes classed with goblins and again as a merry joyous race. They are called Casiri by Pliny, and in them we recognise the Khasiyas. [9] A demon race named from '*raksh*,' 'to injure.' Sometimes said to be descendants of the sage Pulastya, who was father of Vishravas, father of Ráwan. Their principal abode was Lanka or Ceylon under their chief Ráwan. [10] The Apsaras are female deities, the wives of the Gandharvas; they were produced at the churning of the ocean. For a long note about them see Goldstucker's Sanskrit Dictionary, p. 222, reproduced in Wilson. VII., 80. The Padma Purána makes the Kashmíri Vách mother of both the Apsaras and Gandharvas.

Gandharvas,[1] Nágas,[2] Siddhas,[3] Vidyádharas,[4] birds, beasts and everything contained in the world.

Raja Vena.[5]

From the Rishi Atri came the Raja Angá, and from him Vena, who tyrannised over the world so that all mankind rebelled against him and killed him. Then they took his body and rubbed it, and from the right side sprang forth Prithu for their king. During the reign of Vena all plants had perished by reason of his tyrrany, and when Prithu saw this, he was wrath and took his bow and arrows to destroy the earth, and she, in the form of a cow, fled from him through the three spheres, but no one dared to shelter her for fear of Vena. Then in despair she stopped and demanded the protection and pardon of the king. He consented on condition that the earth should deliver up the plants that she had hidden. To this she agreed and asked the king to remove the mountains which covered her and which prevented the spread of vegetation. Then Prithu with his bow uprooted the mountains and heaped them up one on the other, and made the earth level and called her after his own name 'Prithwi.' Then, that the earth might again produce food for man, Prithu created the calf Swáyambhuva Manu, and with his own hand milked from the earth all plants and vegetables. Then

[1] A celestial race living in the sky and guarding the Soma and governed by Varuna as their wives, the Apsaras, are ruled by Soma. They are learned in medicinal herbs, regulate the course of the asterisms, follow after women and are desirous of intercourse with them. In the later legends they are the choristers of Indra's heaven and are held intermediate between men and gods. See further Wilson's Works, VII., 26-84. [2] The serpent race. [3] From '*sidh*,' implying the idea of perfection: in legends, a semi-divine race of great purity and holiness who reside in the ether and are possessed of the eight great supernatural faculties, the power of becoming as small as a mote and the like. [4] Those who are 'the holders of knowledge' which is of four kinds: (1), *Yajna-vidya*, or knowledge of religious ritual; (2), *Mahá-vidya*, or great knowledge leading to the Tántrika worship of the female principle; (3), *Guhya-vidya*, or knowledge of spells and necromancy; and (4), *Atma-vidya*, or knowledge of the soul or true wisdom. [5] The story of Vena is narrated in the Vishnu Purána (Wilson, VII., 179). Sunítha, daughter of Mrityu (death), was mother of Vena, the celebrated Ben of Hindu legends. (See Bijnor Gazetteer, V.) He was inaugurated universal monarch by the Rishis, but immediately proclaimed that no worship should be performed, no oblations offered, and that no gifts should be bestowed on Brahmans; that all gods were present in the person of the king, who is made up of all that is divine. The enraged priests slew the king, and to put an end to the anarchy which arose they took his body and rubbed it, and from its left side sprang forth "a being of a complexion like a charred stake, with flattened features and of dwarfish stature. "What am I to do?" said he to the sages. "Sit down" (*nishída*) said they, and hence the name Nishída given to the aborigines of the plains. From the right arm of Vena sprang forth Prithu, to whom Mahádeva gave his bow *Ajagava* and celestial arrows. Prithu prospered and gave his name to the earth and was the first ruler to whom the title of Rája was applied. There is little doubt that he was an Indo-Skythian prince.

the gods and demons all milked the earth of various virtues, so that the earth fled to Brahma and complained to him of the everlasting milking. He took her with him to Vishnu and Siva, and Vishnu asked her what she desired. She asked that as the only means of saving herself the three gods should come and live with her. Vishnu answered that in the form of the serpent Ananta and the tortoise he had already saved the earth, and would again come to help her when her pain became too great to bear, but that now he would not go to her, and further he said that "at some time the head of Brahma will fall upon thee[1] (the earth), and Siva will come to sit upon the mountain of Tankara,[2] and the *ling* of Siva shall be established in many places. Then Vaivaswata Raja shall have a descendant called Bhagirath Rája, who shall bring down Ganga to thee. Then I will myself come in my dwarf incarnation[3] to protect thee from the tyrrany of the Rája Bali,[4] and all the world will know that Vishnu has descended on thee. Then thy pains shall all be removed and the mountains shall cease to afflict thee with their load, for I shall be Himálaya, where Nárada and the Munis for ever glorify me. Siva will be Kailása, where Ganesh and the other gods glorify him. Vindhyáchal will be Brahma, and thus shall the load of the mountains be removed." Then the earth said—"Why do you come in the form of mountains and not in your own form?" Vishnu answered—"The pleasure that exists in the mountains is greater than that of animate beings, for they feel no heat nor cold, nor pain, nor anger, nor fear, nor pleasure. We three gods as mountains will reside in the earth for the benefit of mankind." Then the three gods vanished and the earth returned to her former place.

* *Establishment of the Siva Lingas.*

Daksha Prajápati[5] had a daughter who was called Káli and who was married to Siva. Daksha summoned all the gods to worship them at Kankhala near Hardwár, but he omitted to invite Siva and his wife, for he admired neither the manner nor the appearance of Siva. The goddess Káli went to see the sight though uninvited, but her father was displeased at her coming and did not do her

[1] At Brahm-Kapál, the great rock in the river above Badrináth. [2] Tangnowa near Jageswar. [3] In the Vámana *avatár*. [4] Page .
[5] The story of Daksha's sacrifice is very old and is repeated in nearly all the Puránas. For an account of his family see Wilson, VI., 108, and of the sacrifice, *Ibid.*, 120, and *Gazetteer*, II., 289.

honor. Then in rage she jumped into the *kund* (or excavation in which the sacred fire was placed) and was burned up. Siva, who was seated on Kailás, rushed in wrath to the place and destroyed Daksha and all that he found there, and he took the ashes from the fire where his wife had perished and smeared them over his body and went to Tankara,[1] the mountain of Jageswar, covered with all beautiful plants and *deodár* trees (*Cedrus deodara*), and began there to perform great austerities in order to propitiate the eternal Brahm. Vasishtha and many other Munis and their wives lived on this mountain. One day the women were walking through the jungles plucking *kusha* grass and sticks;[2] and they saw him smeared with ashes, wearing a snake as a necklace round his neck, sitting with closed eyes and speechless, and his heart heaving with sorrow. The women wondering at his beauty collected round him. The Rishis when their wives did not return were greatly alarmed, and when their wives did not come back all night they went to search for them and found Mahádeo seated as before motionless and their wives senseless on the earth all round. The Rishis, believing that they had been brought there by Siva, began to abuse the god and said—"Let the thing with which you have done this injury (*i.e.*, your *ling*) fall upon the earth." Then Siva said—"You have cursed me without cause; yet shall it not be said that you have beheld me without advantage, though by your curse, which I shall not oppose, my *ling* shall fall. You shall become the seven stars[3] in the constellation *Saptrikhi*, under the rule of Vaivaswata Manu, and shall shine in the heavens." Then Siva in obedience to the curse of the sages flung down his *ling* upon the earth; the whole earth was covered with the *ling*, and all the gods and the Gandharvas came to glorify Mahádeva, and they called the *ling* Yagísa[4] or Yagíswar, and the Rishis became the stars of the *Saptrikhi*.

[1] The hill on which the old temple of Jageswar stands in Patti Dárún. [2] For their husbands' use in performing sacred rites. [3] Ursa Major or the pole-star, *dhruva*; see Wilson, VI., 174. [4] Because the women were collecting grass and wood for the *yagya* or sacrifice. The legend of the amours of Mahádeo with the wives of the Rishis belongs to the Agni form of Siva, and we find in the Mahábhárata that Agni is made the hero of the tale. Svaha taking the form of the wives of the Rishis satisfied Agni and from the deity a son was born, called Skanda, from the seed discharged (*skanna*) and collected in a golden reservoir by Svaha and called Kárttikeya, because he was brought up amongst the Krittikas, who lived on Kailás and who are possibly one with the Kritiyas of Kashmir, where this cult had its origin. He has six heads and other members and but one stomach, in allusion to his birth. Urundhati, the wife of Vasishtha, the seventh Rishi, took no part in the matter: see Muir, IV., 354, 364.

There is no place[1] in the universe where Siva is not; therefore doubt not, O Rishis, that the *ling* of Siva could overshadow the world. Then Vishnu, Brahma, Indra, the sun and the moon, who were then at Jageswar worshipping Mahádeva, left each a portion of his own self (*i. e.*, power and instructions) at Jageswar. Then the cow Prithivi came to Siva and said—"I am burdened with thy *ling* and cannot move it; lift me up and deliver me therefrom." The gods then set out to examine how far the *ling* extended: they reached the serpent Ananta and still there was the *ling;* then they returned, and Prithivi asked—"How far does the *ling* extend?" Brahma answered—"I have seen its end: it extends to the end of you (*i.e.* of the world.)" Then Prithivi said—"You, a great god, have lied: henceforth in the world none shall worship you." Brahma answered—"You too, when the last *yug* shall come, shall be filled with Mlechchhas.[2]" Then she asked the other gods if they had seen the end of Mahádeva's *ling*; they answered—"Brahma, Vishnu and Kapila do not know; what power have we to know?" She then asked Vishnu; he went to Pátála to search, but still did not find the end. Here the gods said to Vishnu—"We cannot find the end; yet the *ling* must be removed from the earth or the world will perish." Then Vishnu prayed Siva to grant him a request. Siva agreed, and Vishnu said—"The earth is weary of thy *ling;* lift it up from her;" and Siva answered—"Cut up the *ling* with thy *chakra* into pieces and set up everywhere the fragments for worship, and there too in each place leave a part of yourselves for worship." Then Vishnu cut up the *ling* into many pieces and throughout the world the fragments were left for worship. Thus was the earth rejoiced with the establishment everywhere of the *ling* of Mahádeva throughout the nine divisions (*khandas*) of the earth.

The Pandas of Jageswar have the same story, except that they make the seven wives of the Rishis enamoured with Mahádeo. They met him in the forests whilst nude, performing the celebrated dance which he invented for the gratification of Párvati and accompanied by the music of the tabor. In consequence of the curse of the Rishis, the *ling* fell on the earth, and Vishnu at length consented to become the receptacle or *yoni*, and cutting up the *ling* distributed it over the twelve great *linga* temples of India, whilst the smaller fragments are preserved at Jageswar. Numerous legends are told to inculcate the value of a pilgrimage to Jageswar, and even Vishnu is brought in and made to describe its extent, rivers, and forests from the marks on the palm of his hand. It is said to be 144 square miles in extent, being bounded on the east by Jateswar; on the north by Gananáth; on the west by Trinetra, and on the south by Rámeswar. The ridge called Iswardhár is supposed to be the scene of the dalliance with the wives of the Rishis.

[1] Spoken by Vyása to the Rishis. [2] This would point to a post-Musalmán period for this composition.

The nine Khandas.

The *Khandas.*

Four of these *khandas* are situate in Himáchal. The first is the Himádri-khanda. Káli, who had been burned[1] at Kankhala, was born again as Párvati, the daughter of Himáchal, and was again married to Mahádeva. The second is Mánasa-khanda named after Mána-sarovara, the first created of all *tírthas* made by Brahma. The third is Kailás-khanda, named from Kailás, where Siva himself with all his servants reside. The fourth is Kedára-khanda around Kedár, on seeing which the five Pándavas were cleared from the guilt of patricide. The fifth is Pátála-khanda, where the Nágas worship the *ling*. The sixth is Káshi-khanda, where is the great *ling* called Visveswara, where everything that perishes finds salvation (*mukti*). The seventh is Rewa-khanda, in which is the Rewa river, and whoever bathes in it finds deliverance and its stones are known as Narmadeswara. In this khanda is the *ling* called Rámeswara. The eighth is Brahmottara-khanda, where is the Gokarneswara *linga*.[2] The ninth is the Nagar-khanda, from hearing of which souls are received into the paradise of Siva. In this *khanda* is Ujjayini.

Birth of Uma or Párvati.

Then Janamejaya addressed the Súta and said—'How did Káli after her cremation become Párvati?' The Súta replied—'Himáchal and his wife Mena performed great austerities and prayed for children. Brahma and the other gods asked—'Why do you mortify yourselves so?' Mena replied—'Give me such a child as will do honour to all of you.' The gods approved and disappeared, and in answer to Mena's prayer Párvati was born. Párvati worshipped Siva and is also known as Uma, Gauri, Durga, Kálika, and Bhadra. At this time the Daityas expelled the gods from paradise. The gods then went to Brahma and represented their case and said—"The Daitya called Tárakásura[3] has conquered us: expel him again from Swarga." Brahma answered—'In return

[1] The Kúrma Purána relates how Sati, daughter of Daksha and wife of Siva, voluntarily suffered cremation and was afterwards born again as the daughter of Himáchal by Mena, and in that character as the only Káli or Uma again became the wife of Siva as Bhava and is hence called Bhaváni. The story is also given in Kálidása's Kumára Sambhava; Muir, IV., 385, 430. [2] In the Kánara district of the Bombay Presidency. [3] The Daitya Táraká, son of Hiranyáksha, the son of the Rishi Kasyapa, and Diti, daughter of Daksha. Váruni or Sura, the goddess of wine, was taken by the gods and rejected by the Daityas: hence the former are called Suras and the latter Asuras.

for his devotions, I promised this Daitya that he should not die even by the hand[1] of Vishnu, but I will tell you how to act. Go to Siva, who is seated with his mind intently fixed on one object, disturb his contemplation; then he will marry Párvati, and from her a son shall be born who shall destroy the demon Táraká. Then Indra placing Kámadeva before them went to Siva and began to glorify him; then Mahádeo opening his eyes saw Kámadeva before him, and with rage fire issued from his body and burned up Kámadeva.[2] Then the gods began to glorify Mahádeva, and he asked them what they desired. They told him that they wished that he should beget a son on Párvati to slay the demon Táraká. Mahádeo agreed and told Brahma to go to Himáchal and ask his daughter in marriage. He went and told Himáchal that Párvati was Káli and asked for her for Mahádeo. Himáchal consented and Brahma returned to tell Siva to make his preparations for the marriage. Siva said—'Call Viswakarma, the workman of the gods.' Viswakarma came and prepared all that was wanted and made a golden image of Ganesha, which he told Siva to adore, for it was from a neglect of Ganesha that Káli had been destroyed. Then Brahma said—'If Kámadeva shall perish, the world will end for want of children;' and Mahádeo said—'Henceforth Kámadeva shall live in the minds of all men; he need not again take a bodily shape." Then Mahádeva smeared his body with ashes and threw over his shoulders the skin of a deer and adorned himself with snakes instead of jewels, and took the *trisúla* in his hand and wearing a necklace of dead men's skulls and seated on a bull, he went off to the marriage. Stopping on the south bank of the Gomati,[3] he worshipped Ganesha, and thence went to the confluence of the Gomati and Garuri,[4] where he sat down and told Brahma to announce the arrival of the marriage procession to Himáchal. Brahma did as he was ordered and delivered presents to Himáchal, who came out to meet Mahádeva and took him to his dwelling, where he gave to Mahádeva his daughter and all the gods and Gandharvas and Apsaras, and others glorified Mahádeva. Then

[1] See Muir, IV., 224. [2] Said to have taken place at the confluence of the Sarju and the Ganges. See Wheeler, II., 41, and Muir, IV., 364. [3] The Gomati rises in the Katyúr valley and joins the Sarju at Bágeswar. [4] Now called Garur-Ganga. This confluence is a little below Baijnáth and the place where Siva sat down on the grass was called Baidyanáth from the herbs on which he sat becoming good for medicine. Triyogi-Naráyan is also claimed as the site of the wedding of Siva and Párvati by the Garhwális.

Himáchal, after he had distributed gifts and done due honor to the companions of Siva, received as a gift that he should henceforth be honored like Siva himself throughout the universe. Then Brahma and the other gods went back to their respective dwellings, and Siva and Párvati and their attendants went to Kedára-mandal (or circle of Kedár).

Legend of Himáchal.

Janamejaya then addressed the Súta and said—'You have told me the history of Siva, now tell me the *máhátmya* of Himáchal.' The Súta replied as follows in the words of Vyása:—'Himáchal is the giver of the four gifts,[1] *dharm*, *artha*, *káma*, *moksha*. Mahádeva always resides in Himáchal and on him attend the gods; and in him are many caves and much ice. The *máhátmyas* of Himáchal were related by Dattátreya Rishi[2] to Káshi rája.[3] Once this Rishi went from Shesháchal[4] to behold Himáchal. He saw upon him many lakes, and *bhojpatra*[5] and other trees and mines of gold and other metals, and tigers and deer and every species of birds, and wild men, and medicinal plants. When Himáchal saw Dattátreya approach, he bowed in reverence before him and after doing him all due honor, he asked the sage why he had come to visit him. Dattátreya said—'Thou art the greatest of mountains and the Ganga and the other holy streams flow from thee and Siva resides in thee, and on thee fell the *ling* of Siva and his wife is your daughter; thou art like a god. Vindhyáchal[6] and the other mountains join their hands before thee, therefore have I came to behold thee; now show to me thy *tírthas* and the *ling* of Mahádeva and thy caves and thy mines of precious metals.' Then Himáchal showed Dattátreya Mána-sarovara, and in the midst a golden *ling* and the *rája-hansa*.[7] Then Dattátreya went all round the sacred lake and bathed in its waters and in that of its streams; then he saw Siva seated in a cave with Párvati and before him was Brahma and the gods glorifying him and the Gandharvas singing and the Apsaras dancing. Then he saw Ganga which descends from the foot of Vishnu to Kailása, and thence to Mána-sarovara, in which he bathed. Then he saw the

[1] Virtue, wealth, desire, absorption or death. [2] One of the seven human incarnations of Vishnu. [3] Son of Káshi and descendant of Ayus, eldest son of Pururuvas. [4] Abu. [5] *Betula Bhojpatra.* [6] See legend of Agastya, *postea.* [7] Royal goose with red legs and bill. Great grey goose called Mánasankar or dweller in Mána: Wilson, XL., 90.

Brahmkapál and the *Saptrikhi* who dwell there. Then he went to Kailás, where he again found Siva and Párvati, and the gods, and he worshipped Siva, who said—'Ask what you desire.' He asked that the power to go through the world when he pleased without obstruction might be given to him, and Siva granted the prayer. Then he asked of Siva—'Which is the greatest of mountains and where do you live yourself, and in the earth which is the most sacred place?' Then Siva answered—'I dwell everywhere, but Himáchal is my peculiar seat, and on every one of his peaks I dwell for ever and on the mountain of Nanda[1] dwells Vishnu, and I and Brahma also. There is no other mountain like Himáchal; look upon him and receive whatever you desire.' Then Dattátreya glorifying Mahádeva departed to the north, where he saw a lake filled with the juice of the *jáman*[2] and other lakes and temples of Siva and Vishnu, where the Gandharvas were singing and the Apsaras dancing. Thence he turned back to Kedár,[3] where he saw many holy Rishis in caves, performing austerities and the river Mandákini;[4] then he came to the mountains of Nar-Naráyana[5] and worshipped at Badrináth, and he saw Lakshmi and Nárada and the other sages and the Alaknanda.[6]

Dattátreya and the Rája of Káshi.

Dattátreya again visited Himáchal and taking leave went to Káshi[7] and proclaimed the glories of Himáchal to the Rája Dhanwantari.[8] Then the Rája said—'In the earth which is the greatest of *tírthas* and what *tírthas* have you beheld?' Dattátreya answered and said—'You are the greatest of rájas and there is no *tírtha* like Káshi, where you live. He who even without going to Káshi desires to see it and dies with the name of Káshi in his mouth finds release, for there is Ganga and Visveswara. In the three spheres there is no *tírtha* like this.' The Rája answered and said—'This is true, but tell me also of the other *tírthas* which bring blessings on mankind. I have heard that formerly rájas went to Swarga with their bodies, by what road did they go?' Then the sage said—'He who thinks on Himáchal, though he should not behold him, is greater

[1] Nanda Devi. [2] *E. jambolana.* [3] Mountain on which the temple is situated. [4] A river in pargana Nágpur in Garhwál which rises in the Kedár glacier. [5] One of the Badrináth peaks: see page [6] The eastern branch of the Ganges which rises in the Níti valley. [7] Benares. [8] Grandson of Káshirája and produced from the churning of the ocean. Wilson, IX., 3.

than he who performs all worship in Káshi, and he who thinks of Himáchal shall have pardon for all sins and all things that die on Himáchal, and all beings that in dying think of his snows are freed from sin. In a hundred ages of the gods I could not tell thee of the glories of Himáchal. This was the road the rája took to heaven, where he went with his body. That Himáchal where Siva lived and where Ganga falls from the foot of Vishnu like the slender thread of a lotus flower and where the Rishis worship and where the Siva *lingas* are numerous. I behold Mána-sarovara and there in the form of the *rája-hansa* dwells Siva. This lake was formed from the mind of Brahma, therefore was it called 'Mánasa-sarovara.' There dwell also Mahádeva and the gods, thence flow the Sarju[1] and other (female) rivers and the Satadru[2] and other (male) rivers. When the earth of Mána-sarovara touches anyone's body or when anyone bathes therein, he shall go to the paradise of Brahma, and he who drinks its waters shall go to the heaven of Siva and shall be released from the sins of a hundred births, and even the beast who bears the name of Mána-sarovara shall go to the paradise of Brahma. Its waters are like pearls. There is no mountain like Himáchal, for in it are Kailás[3] and Mána-sarovara. As the dew is dried up by the morning sun, so are the sins of mankind dried up at the sight of Himáchal. At Mána-sarovara, the king,

[1] The Kumaon Sarju rises at the foot of Nanda Davi, but this may refer to the Karnáli, the longest branch of the Sarju of the plains and which rises close to Mána-sarovara. [2] The Satlaj, which rises in the Rákas lake, which is itself connected with the Mána lake. [3] The following description of Kailás as seen from the pilgrim route is interesting:—'On the approach to the lake,' writes an observant traveller, 'the Gángri range continued far to the eastward, rising out of a wide green plain. This extended between the base of the mountains, and the northern shore of both lakes (Rákas and Mána) being visible from this as far as the low hills on the north-western corner of Mána-sarovar. The most remarkable object here was Kailás, now revealed in full proportion to its very base, rising opposite (northward) straight out of the plain only two or three miles distant. The south-west front of Kailás is in a line with the adjacent range, but separated on either side by a deep ravine; the base of the mass thus isolated is two or three miles in length perhaps: the general height of it is about 4,250 above the plain, but from the west end the peak rises some 1,500 feet higher, in a cone or dome rather of paraboloidal shape. The peak and upper ridge were well covered with snow. The stratification of the rock is strongly marked in successive ledges that catch the snow falling from above, forming irregular bands of alternate white and purple. One of these bands more marked than the rest encircles the base of the peak, and this, according to Hindu tradition, is the mark of the cable with which the Rákshasa attempted to drag the throne of Siva from its place' * * 'In picturesque beauty Kailás far surpasses the great Gur-la or any other of the Indian Himálaya that I have seen: it is full of majesty, a king of mountains.' Through the ravines on either side of the mountains is the passage by which the pilgrims make the circumambulation. The circuit is performed in two days by those who take it easily, but with more exertion it may be done in one day.

Bhagiratha,[1] performed the austerities by which the holy Ganga was produced and Vasishtha obtained the Sarju. The country around this holy lake is called Mánasa-khanda.

The creation of Mána-sarovara.

The sons of Brahma, Maríchi and Vasishtha and the rest proceeded to the north of Himáchal and performed austerities on Kailása. There they saw Siva and Párvati, and there they remained for twelve years absorbed in mortification and prayer. There was then very little rain and little water, and in their distress they went to Brahma and worshipped him. Then Brahma asked what their desire might be. The Rishis answered and said—'We are engaged in devotion on Kailása and must always go thence to bathe in the Mandákini; make a place for us to bathe in.' Then Brahma by a mental effort formed the holy lake of Mánasa. The Rishis returned and rejoicing at the success of their journey again engaged in mortification and prayer on Kailása and worshipped the golden *ling* which rose from the midst of the waters of the lake.

Story of Mándhátri.

The rája then said—'The journey to Himáchal is a very difficult undertaking for man; who was it prescribed the necessity of making a pilgrimage to him?' Then Dattátreya said—'From Vaivaswata was descended the Rája Mándhátri,[2] and one night the earth, in the shape of a woman, came to the rája and said to him—'In the world I have not seen a man so beautiful as you, therefore I come to you.' Mándhátri said—'Art thou the daughter of a god or a Dánava, or an Apsara, that thou art so beautiful?' She said—'I am the earth who have come to thee seeing thy beauty. I have left all other rájas.' He said—'I have sworn to have only one woman to wife, therefore charm some other of the kings of the earth.' She said—'All the former rájas who were my masters have ascended in old age to Swarga, but I remain still a young maiden. I will have thee for my husband.' He said—'If I die, my wife must burn on my death as Sati; how shall the earth, who does not die or grow old, take me, who am a mortal, for her lord?' She said—'When I too become old, I will burn with you as Sati.' Then Mándhátri married the earth and

[1] To propitiate Siva, so that Ganga might descend from heaven and purify the ashes of the sons of Sagara. Muir, IV., 365. [2] Wilson, VIII., 267: another of the human incarnations of Vishnu.

lived in happiness. When he became old he said—"Let me go into the forests and engage in prayer and mortification. Then dying together we will go to Swarga and live together.' Then the earth laughed and said—'I am young, how shall I go with you? when I become old then I will die with you.' Then Mándhátri was enraged and drew his sword to kill the earth, and she fled towards Himáchal and the rája followed her, and she reached Mána-sarovara. Then on the banks of this lake the rája cut off her head, but the earth could not perish and vanishing in the waters went down to Pátála, where she worshipped the gods who were seated on Kailása.

Route to Mána by Barmdeo.

The rája next inquired 'Which is the road to the holy lake?' Dattátreya answered and said—The pilgrim must go by the road of Kúrmáchal[1]; he must first bathe in the Gandaki[2] and then in the Loha,[3] and let him then worship Mahádeva and the other gods. Then let him worship on the top of Kúrmá-sila[4] and bathe in the Hansa-tírtha,[5] thence let him go to the Sarju, then to Dárún or Tankara,[6] and worship Mahádeva, thence to Pátála Bhubaneswara,[7] and then without eating for three days let him worship Siva. Then let him bathe in the Rámganga and worship at Baleswar. Thence to Pában[8] mountain and worship Siva, thence to Patáka[9] and worship Siva, and he should then bathe at the confluence of the Káli and Gori.[10] Thence to Chaturdaunshtra[11] mount and worship Siva there. Then to Vyásásrama and worship Vyása[12] and then to the source of the Káli, then to Kerala[13] mount and worship Debi; thence to Puloman[14] mount, where there is a lake; thence to the mount of Táraka[15] and let him bathe in the Tárani and Sárda (or Káli), where

[1] The old name of Kumaon on the Káli, now applied to a hill near Champáwat in Patti Chárál, surmounted by a temple to Ghatku and fabled as the spot where Vishnu descended in his tortoise *avatár* to save the earth. [2] The Gidhiya river in Káli Kumaon. [3] The Lohaghát river in Káli Kumaon. [4] Kánadeo, a hill in the eastern Gágar range near Chhirapáni in Patti Chárál and surmounted by a temple sacred to Mahádeo. [5] A stream and waterfall on Kánadeo. [6] The hill on which the Jageswar temple is situate in Patti Dárún. [7] A temple and cave in Patti Baraun of parganah Gangoli north of Gangoli Hát Dák Bungalow. [8] The mountain in Patti Máli and parganah Síra above the temple of the Thal Baleswar. [9] The Dhvaj peak in Patti Kharáyat to the north of Pithoragarh. [10] Near Askot. [11] Patti Chaudáns. [12] Patti Byáns is sacred to Byáns Rikhi, the Vyása of the Puranas, who is supposed to reside on the Kalirong peak near Chángru in Byáns. [13] Also in Byáns and called Chhechhala. [14] A peak in the dividing range between Dárma and Byáns, at the foot of which is a small lake known as Mán taláo or Byankshiti between the Jhúling and the Rárub Yankti. [15] The Táraka-dhúra or pass into Tibet.

they join. Then let him behold the caves and worship the gods and let him cut his beard and fast and perform the *Sráddha* ceremonies.[1] Then to Gauri[2] mount and then descending to Mána-sarovara; let him bathe there and give water to the *manes* of his ancestors and worship Mahádeva in the name of the *rája-hansa*. Then let him make the *parikrama* (circumambulation) of the holy lake Mána and look on Kailása and bathe in all the rivers around.

The return journey.

Then the Rája asked—'By what way do you return from the lake Mána?' The sage replied—'Pilgrims must first go to Ráwan-hrad[3] and bathe and worship Siva; then let him worship at the source of the Sarju;[4] then to Kechara-tírtha;[5] thence to Brahm-kapál;[6] thence to Chhaya-kshetra and worship Mahádeva; thence to Rámasera and bathe there; thence to Rinmochana and Brahma-sarovara, thence to Sivakshetra and thence to the mount of Nanda; thence to Baidyanáth, thence to Mállika,[7] where let him worship Devi and bathe in the Bridhagang. Thence to Jwála-tírtha,[8] where he should worship the sacred fire and bathe in the Padmávati. Thus is the pilgrimage completed.

Mána-sarovara.

On the south of the Mána lake is the mountain Sambhu,[9] from which issues the river Shesti, which flows to the north into Mána, near which are mines of silver and lead: near this the sands are red and the waters white. To the north is the Nála mountain,[10] whence issues the river Kapila, which flows into Mána-sarovara, while to the south is a cave and a gold mine. From the Nála mountain, a river,

[1] Rites in honor of ancestors to be performed on occasions of rejoicing: see further Wilson's Works, VIII., 146-198. [2] Probably may be identified with Dolma La a ridge behind Gur La or Mándhátagiri, the great peak to the south of Mána-sarovara on which is a small pool called by the pilgrims Gauri-kund. [3] The lake to the west of Mána-sarovara, also called Rákas Tál. [4] As already noted, this probably refers to the Karnáli, a tributary of the Káli, Sárda or Ghágra which rises beyond the snowy range in Hundes. The river known as the Sarju in Kumaon rises to the south of the snowy range and its eastern branch or the Káli also rises in the southern slopes of the snowy range. [5] Kechara-tírtha is on the Karnáli: it is now known as Kajar or Khojar-náth and is the site of a monastery. [6] The great rock in the river above Badrináth is called Brahm-kapál: this refers to a second one in Tibet as well as the succeeding terms which I have not been able to identify. Rinmochana may be Gáringbocha or Gángri, on a ledge in the base of the Kailás peak, about the middle of the south side. It is called by the pilgrims Darchin and is one of the places which they are bound to visit. Brahma-sarovara is a synonym for Mána-sarovara, which was formed from the mind of Brahma. [7] Near Mála village. [8] Jwálamukhi. [9] This must refer to Gur-La, from which several streams flow into Mána-sarovara. [10] This also must be a peak of the Kailás range, from which two streams flow into Mána-sarovara near Sarniah-Uniah.

called Pushpabhadra, flows to the east into Mána-sarovara and also the Devabhadra. Here Rámachandra propitiated Mahádeva,[1] and from this went to Swarga, leaving his horses and elephants, which still remain there. Near this flows the Chandrabhága[2] from the head of Siva on Kailása. From the mountain Gauri flows the Sárda[3] into the Mána lake. From Kailása flows the Mandákini or Bhadra to the south into the lake.[4] West of this river are five lakes,[5] *Káli-hrad, Kan-hrad, Padma-hrad, Káli-hrad* and *Hari-hrad.* To the left of Kailása is the Kalápa peak, where are many caves and mines of gold and silver; from it flows the river Sonanda, of which the water is the color of gold; this flows into the Mána lake.[6] Near Kalápa is mount Meru; this mountain is blue and from it falls the Saraswati and Suvarna-dhára, which also flow into Mána-sarovara.[7] Beyond these is the Mahendra mountain, from which flows the river Mahendri into Mána-sarovara; from it also flows the river Baruni with yellow waters into the lake and the Swatí.[8]

Mountains.

Now hear me, in reply to your inquiries, detail for your information the names of the mountains and rivers. The first of all is

[1] The Mahábhárata records that it was on the Gandhamádana mountain that Ráma propitiated Siva and obtained from him his weapons and among them the axe (*parasu*), whence his name Parasuráma or "Ráma of the axe." The Gandhamádana peak is above Badrináth. [2] The Chandrabhága is the Chináb or Sandabilis or Akesines of Ptolemy known, as the Asikni in Vaidik times: it rises however in Lahúl and the term in the text properly applies to the Satadru or Satlaj. [3] This is correct if the Karnáli is intended. [4] Besides the two streams at Sarniah-Uniah already noticed, the Pandit makes the Som-chu flow into the lake from the Kailás range on the north. [5] East of Mána-sarovara is the Gunkyut-cho; to the north, the Gorgel-cho; to the west, the Cho Lagan or Ráwan Hrad, and further west near Gyánima the Tara-cho. [6] Four streams flow from Kailás into Cho Lagan: the Barka-cho, the Jong-cho, the Sár-cho or golden stream (or Sonanda), and the Kalápa-cho or Kalápa river. The two latter join the lake near its outlet which forms the source of the Satlaj. [7] Lieutenant Henry Strachey, who visited the lake, writes:—"The permanent affluents of Mápán are three or four. First a stream rising in two branches from the Gángri mountains and falling into the lake at the eastern quarter of its north side; the second, also from the Gángri range, a few miles further east, entering the lake at the north-east corner: at the very same point is the mouth of the third stream which rises in Hortol. The fourth affluent is doubtful: a stream possibly comes from the Nepál Himálaya into the south-east corner of the lake. In the summer season there are many temporary streams from rain and melted snow" (J. A. S. Ben.) [8] Here follows an account of numerous places of pilgrimage on the lake, chiefly Siva lings and legends connected with them and in honor of the sacred lake. The lake is about 45 miles in circumference and it takes four to six days to perform the journey and worship at the different shrines. There are eight principal stations known locally as (1) Tokar, on the middle of the south side: (2) Gusar, at the southern quarter of the east end: (3) Ju, at the northern quarter of the east end: (4) Jakyab, at the western quarter of the north side: (5) Langduna, at the middle of the north side: (6), Bundi, at the north-east corner: (7) Sárálang, at the middle of the east end: and (8), Nunukur, at the south-east corner.

Nanda, where dwells Nanda Devi. Then comes Drona (Dunagiri near Dwára); then Dárúkavana (Jageswar) and then Kurmáchal (Kánadeo in Káli Kumaun), beyond which the Mánasa-khanda ends. Then comes Nágpura; then Dárún (in Gangoli); then Pátana (above Baleswar in Síra); then Panchsíra (Panch-chúli); then Ketumána (a ridge in Goriphát); then Mallik-Arjun (in Askot); then Gananátha (in Byáns), &c., &c.

Legend of Nanda Devi.

On the peak of Nanda is a lake and there is the abode of Vishnu and Vishnu himself. From Nanda flows the Pindaraka[1] from the hair of Mahádeva into the Vishnuganga.[2] In it meet the Káli[3] and Saraswati[4], Kámathi, Vaindhya, and Bodhini.[5] The Brishchiki and Krikalási also flow from Nanda. The Pindaraka joins the Vishnuganga at Karnaprayága, where the king Karna worshipped the sun and received from him whatever he desired, gold and jewels and wealth, and he founded the *ling* of Karneswara Mahádeva.[6] South of Karnaprayága is the mount Vaindhya, five peaked, with beautiful trees and many mines. To the west of this the Dárakapeak,[7] from which flows the river Chandra into the Pindar. Beyond this is the hill of Durhiddhya and the Pánda. Then Benu,[8] a great mountain with great caves and mines and stones of white crystal. On its peak is the Churesa-linga.

The western Rámganga.

The Rathabáhini[9] possesses the seventh part of the virtues of Ganga; its sands are golden and in it are many fish and tortoises.

[1] Pindar river. [2] The Alaknanda, so called from the confluence at Vishnuprayág. [3] Kailganga. [4] Sundardhúnga. [5] Flows from the Vaindhya hills, which from the subsequent description I would identify with the peaks in the watershed between the Pindar and western Rámganga above Lohba, where there are mines. There are several rivers flowing from this range into the Pindar, and I would assign the name Vaindhya to the Agar-gár. [6] Karna is one of the characters in the Mahábhárata and the temple at Karnprayág dates from Katyúra times. [7] The peak above Darkot now known as Santholi; the Chandpur river flows by its eastern base and joins the Pindar at Simli. [8] The Durhiddhya and Panda peaks will be the Dhobri and Pandabri peaks on the Dhanpur boundary and the Benu, the Ben peak above Adbadri and near Beni Tál. [9] The western Rámganga: Wilford indentifies the Pauránik Váma or Suváma, 'the beautiful river,' with the Rámganga. It is also called Sarávati, 'full of reeds,' and Bánaganga because Kárttikeya was born in a thicket of reeds on its banks at a place called Saraban, 'reed-forest.' The *Saccharum Sara* still grows on its banks (*Gaz.*, X., 807). In the *Amara-kosha*, the Rámganga is called the Sausami (= Su-sami) in the country of Usínara. The word is introduced on account of its referring to a town called Kantha known as Su-sámi Kantha; but if this be Kanth-o-golah, the old name for Shahjahánpur, then the term Sausami will not apply to the Rámganga.

He who bathes in it shall be cleansed of the sins of a hundred births. In a hundred years the *tírthas* cannot be told. The Saraswati is the first to join the Rathabáhini and the Gotami and Sakati and Sara[1] and the Beláli[2] which flow from Drona. On the left of the Rathabáhini is the Nágárjun,[3] where the serpent Arjun is worshipped. To the right of this is the mount Asura,[4] where Káli is worshipped, and to the right of Nágárjun is the Siva-ling of Bibhandeswar,[5] which is the right hand of Mahádeva. After Mahádeva had been married to Párvati, he demanded from Himáchal a place to sleep in; and he rested his head on the head of Himáchal and his back on Níla and his right hand on Nágárjun and his left hand on Bhubaneswar (in Gangoli) and his two feet on Dárúkávana (*i.e.*, the jungles of Dárún near Jageswar). This is the most glorious of *tírthas*. The river of Bibhandeswar is called Surabhi,[6] for Kámadhenu, the cow of the gods, by the order of Brahma, took the form of this river. The Nandini and Saraswati join the Surabhi and flow into the Rámganga.[7] At this *sangam* (confluence) is the Senasanavasi Siva-ling.

Dunagiri.

From the great hill of Drona flows the Druni[8] into the Rámganga. Above Drona is the mount of Brahma, whence flows the Gárgi,[9] at the source of which the Rishi Garga made his devotions. To this mount came Duhsásana the Kaurava and conquered the rája of the mountains and bathed at the junction of the Satradhára and Sukávati, and there he established the Siva-ling of Duhsásaneswara.[10] Dronáchal has two heads and two feet: one head is called Lodhra, the other Brahma, and between them is the source of the Gárigi. Here at the source of the Gárigi is the Gargeswara Siva-ling. Into the Gárigi flow the Bilwávati and Betrávati and Bhadrávati and then the Sukávati; then join the Sailávati, and the

[1] Streams of the Lohba valley. [2] Drona is Dunagiri and the Betáli may be either the Kham-gadh, which flows from near Dwára to the Rámganga, or the stream issuing from Tarág Tál. [3] The Nágárjun, or as it is commonly called Nangárjun temple, is in Patti Dora Malla on the ridge between Dwára and Naithána at the source of the Baluwa-gadh; a Saiva temple according to the Khasiyas. [4] The hill above Páli in Dora Talla, where there are temples to Káli and Naithána Devi. [5] The temple of the Bibhandeswar Mahádeo is situate near Rana in Dora Malla. [6] In Gangoli. [7] The Surabhi must be the Riskui or Riskan, which flows past the temple, but it joins the Gagás near Shaula: the geography here gets confused and unintelligible. At Sainana in Nayán there is a temple to Siva. Bri ddhkedár is mentioned. [8] The river from Bairti beyond Dwára. [9] Gagás, which rises between the Sukhaldevi and Debara peaks. [10] Now called Sukeswar near Bánsuli-sera in Patti Athágulí.

Gárigi joins the Rámganga.[1] At the confluence is the Siva-ling of Chakreswara.[2] To the left is the mount of Báráha. The mount of Drona is between the Rathabáhini and Kausiki.[3] There are many caves and many beautiful trees and flowers and tigers and deer and great creepers and the *Aukhadi*, the plant which shines at night like the diamond and laughs at mankind who know not its value, and on the mount lives Drona. Kálika and Bahnimati and Mahishamurdani are worshipped there. Between the Sálmali[4] and Kausiki is the mount Bidrona[5] and near it is the Siva-ling of Pinákisa,[6] a great *tírtha*.

The Kosi.

There was a Rishi called Kusika who adoring Ganga raised his hands to heaven, and into them fell the river Kausika and thence to earth. Brahma sat on the Lodhra peak[7] and poured forth from a vessel the river Sálmali. Where the Sálmali and Kausiki meet is the *tírtha* of Phálguna,[8] and here is the Someswar Mahádeo where to worship is equal to worship in Káshi and near it dwells the serpent Takshaka.[9] Above is the *tírtha* of Chandrasekhara[10] and the confluence of the Godávari[11] and near it is Mallika Devi.[12] Above, in the Kausiki, are two great rocks, Kausi-sila and Raudri-sila, and above them is Brahm-kapála and Kápila *tírtha* and Dharma-sila and above them is Pinákisa Mahádeo. To the left of the Kosi is the mount Kásháya[13] and on the right is the dwelling of Baráditya[14] further on joins in the Rambha.[15] Beyond Baráditya is Katyáyani Devi[16] also called Syáma Devi. From Tankara[17] flows the Sháli[18] to the Kosi; afterwards the Kausiki breaking through the mount of Sesha flows into Madhyadesa (the plains). The mount Sesha is on the left of the Kausiki. Gandharvas live in its caves and great trees and deer and tigers; on it dwells Seshnága[19] and from it flows the Síta to the Kausiki southwards. Between the Síta and the Kausiki is Asokabanika, the grove of *Asoka* trees where the seven Rishis and the

[1] The affluents of the Gagás on the right bank are the Chaudás, Baiáru, Riskan and Balwa, and on the left bank the Naurar. [2] At Bikiya-ka-Sain: Naulesar temple. [3] Kosi river. [4] River from Lodh, which joins the Kosi at Someśar. [5] Now Bidhon. [6] Pináth. [7] Bhadkot. [8] Same name now, is close to Someswar, where the burning ghát is situate. [9] Near Someswar is a village called Sarp and the great pool in the Kosi below is called Sarp-hrad. [10] Retains the name. [11] Retains the name. [12] A large rock in the river. [13] Kalmatiya hill near Almora, the peak of which is still called Kashár. [14] The temple of the sun at Katármal. [15] A small stream which rises below the Mission School at Almora. [16] Siyáhi Devi. [17] Jageswar. [18] Suál river. [19] There are several Nág temples here.

Satyavrata Rajas did penance. Here there are *Asokas* and other trees and many birds. Rámachandra and Síta and Lakshmana came here by the order of the Rishi Visvámitra. Síta was rejoiced at the beautiful forest and said to Ráma: "It is the month Baisákha; let us stay in this wood and let us bathe in the waters of the Kausiki." So they remained there during Baisákha in the forest and two springs burst forth for them. Thence they went back to Ayodhya, and from that time the name was changed to Sítabani.[1] He who beholds Sítabani can have no sorrow. Near is the river Devaki,[2] and to the right of mount Sesha is mount Gárga,[3] in which are many caves and mines of metals and trees and birds and deer and Rishis and gods live there and from all sides flow down rivers.

The Lakes.

In this tract there are sixty-six lakes at which the sage Garga pays his devotions. Gargáchal is at the feet of Himáchal. On his summit is the Gárgeswar Siva-ling where dwells the sage Garga, and whence flows the Gárigi.[4] On the left of the Gárigi is Bhímasarovara,[5] and west of these Trishi-sarovara[6] which the three Rishis created. The three Rishis Atri, Pulastya, and Pulaha came to the *tírthas* of Himáchal, and from Chitra-sila[7] ascended to the mount of Gárga. They were thirsty and found no water, then they dug into the mount and thought admiringly of Mána-sarovara and on this Mána-sarovara filled up the place, that they had dug, with his waters, and the place was called Trishi-sarovara. He who bathes in it shall derive the fruits of bathing in Mána-sarovara. Around Chitra-sila is the Bhadravata; here is a great *bar* tree in a leaf of which Vishnu floated over the ocean. In Chitra-sila, Brahma, Vishnu, Siva and their Sáktis dwell and Indra and the other gods. Below the junction of the Gárigi and the Pushpabhadra[8] stood the *bar* tree in the shade of which Sutapa Brahma performed austerities for thirty-six years, eating dry leaves and his hands raised to heaven. Seeing him Brahma, Vishnu, Siva, and the other gods came and granted him all that he should desire, and sent for Visvakarma and on the banks of the Gárigi, Visvakarma with gold and

[1] In the Kota Dún where there are several groves of Asoka trees. [2] Dabka river. [3] Gágar. [4] Gaula. [5] Bhím Tál. [6] Naini Tál, or 'lake of the three Rishis.' [7] Or 'painted rock' near Ránibágh. [8] The stream from Bhím Tál which joins the Naini Tál river at Máyapuri, where a fair takes place on Makar Sankránt.

other metals and jewels made the Chitra-sila (or variegated rock) and the virtues of all the gods entered into it, and they took away Sutapa to Vaikantha, the paradise of Vishnu, and he who worships at Chitra-sila and bathes in the Gárigi shall follow him. To the east of Gargáchal are the seven lakes which are the holiest of all the lakes of Garga. The first is Trishi-sarovara, the second is Bhíma-sarovara, the third is Návakona-sarovara[1]; the fourth is Nála-sarovara,[2] the fifth is Damayanti-sarovara[3]; the sixth is Ráma-sarovara[4] and the seventh is Síta-hrada[5]. Bhíma-sarovara was made by Bhíma Sena, and on the banks of it he established the Bhímeswar Siva-ling, from it flows the river Pushpabhadra.

Bárahmandal-Bágeswar.

East of Kálmatiya is the mount of Swayambhu[6] and beyond it is Tankara[7] in which is Dárúkávana (*i.e.*, the forest of Deodárs in Dárún). To the south of Dárúkávana are the hills of Sálmali[8] in which are mines of iron and copper and gold, on Himáchal between Kailás and Manda the gods love to look. At the junction of the Sarju and the Gomati is the Níla mount[9] on which live the gods and Siddhas and Gandharvas, and Apsaras. At the junction is Agni-*tírtha*,[10] and above is the Surya-kund.[11] Between this Báránasi-Kshetra[12] created by Chandisa[13] for the dwelling of Siva. Mahádeva and Párvati when it was ready came to the place, and when they reached it a voice from heaven (*akáshabáni*) glorified Mahádeva, who sat down at the junction of the rivers and Brahma and the other gods came there and they said, "the *akáshabáni* first called out the glories of Siva, therefore shall this place be called Bágiswar.[14]" The Rishi Galava[15] said, 'Let him who wishes to be cleansed from all his sins bathe in the Sarju'. On the mount of Níla the Rishí Márkandeya performed austerities, and while he was there the Rishi Vasishtha

[1] Naukuchiya, 'the lake of the nine '*kuncha*' or corner: if any one see all the nine bays at the same time he meets with some great fortune before the year is out. [2] Nál Tál, one of the lakes comprising the Sát Tál. [3] Ráni Damayanti ke Tál, another of the seven lakes. The two last names refer to the hero and heroine of the well-known episode in the Mahábhárata, for a popular account of which see Wheeler's History of India, I. 480. [4] Kuhúriya Tál, a small pool above Bhím Tál. [5] Close to the Ram Tál, but now dry. [6] Sintola near Almora. [7] Jageswar. [8] Sálam. [9] At Bágesar, the hill above which is now known as Kokru ka danda. [10] Now called Agni-kund. [11] A pool in the Sarju above Bágesar. [12] Now called Uttar-Báránasi, 'the Benares of the north.' [13] One of the servants of Siva. [14] '*i e*, lord of speech' from Sans: '*Vák*,' 'speech' as in compound *Vák-pati*, 'lord of speech,' 'eloquent.' [15] A celebrated sage, the hero of the stories of the white horses with black ears, Wilson XI., 225.

brought down the Sarju from the north. When the Sarju saw Márkandeya, it stopped before him forming a lake, and when Vasishtha saw that by virtue of the austerities performed by Márkandeya the Sarju could not flow onwards, he went to Siva and prayed him to open the road for the river. Then Siva and Párvati, consulting together, contrived a plan by which Párvati became a cow and went to graze near Márkandeya. Siva became a tiger and sprang upon Párvati, and when Márkandeya saw this, he ran to save the cow and drive away the tiger. When the sage rose up from his devotions for this purpose the Sarju seeing himself free flowed onward, and when Párvati and Siva heard the waters flowing they resumed their proper forms. When Márkandeya saw them he began to glorify them and said to Siva, "Thy name is Byághreswara[1], 'the lord of tigers,'" then Siva and Párvati vanished and Márkandeya departed to the paradise of Brahmá.

Dánpur.

In the beginning of the Satya-Yuga Brahma divided the earth into portions giving to each the share to which he was entitled. To the Nágas[2] he gave the country between Jiwara[3] and Dárú and this city was called Nágapura.[4] The chief of the Nágas called Malla Náráyan[5] said to the Rishis, "give us water, there is none here," and the Rishis called down the Bhadra Ganga from the mountains and gave it to the Nágas. The Nágas saw Kámadhenu, the cow of the gods, and asked her to give them cows and she gave them many beautiful cows and the Nágas built sheds (*goths*) for them and ordered their daughters to tend the cows. These Gopis (cow-tenders) saw Mahádeva and the place was called Gopeswara[6] and the jungle was named Gopivana.[7]

The story of Pátála-bhubaneswara.

Between the Sarju and the (eastern) Rámganga is the shrine of Pátála-bhubaneswara.[8] The Rishis asked Vyása to tell them of

[1] From Sans. '*Vyághra*,' 'a tiger.' [2] The serpent race. [3] Juhár, the country between Milam and the Rái peak. [4] Nákuri now giving its name to a patti or fiscal sub-division in pargana Dánpur. A temple to the Nága still exists on the ridge above the village of Papoli. [5] Mulen, the name of the ridge above Suring, on the route to the Pindari glacier was the residence of this Nága chief who received the affix Náráyan as a title on account of his worship of Vishnu. [6] A Sivá Linga of this name now. [7] Gopain. Vásuki the Nága chief is still worshipped at Gadyára, where a great festival takes place in Baisákh and Kártik. [8] The temple is situated in patti Baráun and pargana Gangoli.

Pátála, how does Mahádeva live there in darkness and how large is it, and who are those who worship Mahádeva there and who are the chief of the gods of Pátála, and who first discovered that there was such a place as Pátála, and how can men go there without the sun or moon?' Vyása said—'As is the earth above so large is Pátála below, not even Vasishtha and the Munis can tell where is the end of Pátála, but can only penetrate to where Bhubaneswara Mahádeva resides. Below this there are three caves called Smara, Smeru, and Swadhama, into which no sinful man can enter, and in the Káli-yug they will be shut up. I will tell you the story of how Pátála[1] was discovered by mankind. Rituparna[2] was a Suryavansi Rája of Ayodhya who left his kingdom and travelled north into the mountains with his soldiers and killed many deer and birds. There the Rája saw a great boar lying in a stream of water and attacked the animal with his sword, but the boar fled and the Rája pursued him until fatigued with the sun and thirst he looked about for shade to rest himself. Whilst searching about the Rája reached the entrance of a cave where was a watchman (*kshetrapála*) sitting and asked the man where he could find a shady place to rest in, the guardian of this cave replied—'Enter here and you will find all that you desire.' So the Rája went into the cave and near the entrance he met Dharma and Narsinha and went on with them, and then he came to the serpent Seshnág with the thousand heads and the daughters of the Nága seized the Rája by the hand and brought him before their father. Seshnág asked him who he was and why he had come. He answered—'I am a Suryavansi Kshatriya, and my name is Ritupárna, and I came to Himáchal with my army to hunt; whilst following a great boar I lost my way and wearied with thirst and the sun I came into this cave by permission of its guardian. In a former birth I must have done virtuous acts, that I should behold thee now."

[1] The Vishnu Purána divides Pátála into seven regions, Atala, Vitala, Nitala, Gabhastimat, Mahátala, Sutala and Pátála, inhabited by Daityas, Dánavas and, Nágas. The joys of Pátála are above the delights of Indrá's heaven. The lovely Nága-kanyas wander about fascinating even the most austere; the rays of the sun diffuse light, not heat, by day, and the rays of the moon give light, not cold, by night. There are lakes, groves and flowers, singing birds and skilled musicians to make life enjoyable. Below the seven Pátálas is Vishnu incarnate as Sesha and known by the name Ananta to the Siddhas. He has a thousand heads adorned with the mystical *swástika* and in each hood (*phana*) a jewel to give light. He is accompanied by Váruni, the goddess of wine; he wears a white necklace and holds, in one hand, a plough and in the other a pestle. Sesha supports the whole world as a diadem on his head and is the great teacher of astronomy. The Puránas make him even one with Balaráma.

Then Seshnág said,—'Fear not, tell me what gods do the four classes of men in the earth now worship'. The Rája answered—'They worship Mahádeva and demand from him what they desire.' Then Seshnág said, "Do you know this cave, and that in it dwells Mahádeva?" and the king answered—"No, nor do I know who thou art, but I desire to know all these things." Then Seshnág answered and said—'The name of this cave, O Rája, is Bhubaneswara and where the end of this cave is not Kapila and the Munis can tell: in it live the three gods, Brahma, Vishnu, and Mahádeva, under the single form of Bhubaneswar, and Indra and the other gods, and the Daityas, and the Gandharvas, and the Nágas dwell here and Nárada, and the other Devarshis[1] and Vasishtha and the other Brahmarshis,[2] and the Siddhas and the Vidyádharas and the Apsaras. No sinful men have yet entered this cave, here are the grottoes where Mahádeva and Párvati dwell; behold them; but as with your own eyes you cannot see them, I give to you the eyes of gods.' Then Seshnág gave to the king the heavenly eyes and showed to him Pátála and the dwelling of the gods and the Gandharvas, and Nágas, and Daityas, and Dánavas, and Rákshasas, and the king did them due reverence. Then Seshnág showed him the eight families of serpents, and the Siva-ling of Visveswara and Airávata,[3] the elephant of Indra, and the *Sáryáta* and *Kálpavriksha*,[4] the trees of the gods, and Vrihaspati,[5] the Guru of the gods and the horse of Indra, called Uchchaihshrava and the cave Seshávati in which dwells the serpent king Ananta, whose breath rushes forth into the earth from

[1] The Rishis or sages of the celestial class who lived in Vaidik times in Deva-varsha and are generally recognized as the elder Rishis. The category varies with the different works and some of those called Brahmarshis by the Vishnu Purána are as old as the oldest hymns of the Rig Veda: see Muir's Texts, III, 219: Wheeler, II., 425. [2] The Brahmarshis, Brahmas or Prajápatis, the mind-born sons of Brahmá are Bhrigu, Pulastya, Pulaha, Kratu, Angiras, Marichi, Daksha, Atri and Vasishtha according to the Vishnu Purána, to which some add Nárada Dharma, Adharma, Sankalpa and Ruchi. Hence the term Brahmárshi-desa given to a portion of Central India in the Epic poems. Wilson, II., 143. [3] Airávata, the elephant of Indra, is one of the articles produced from the churning of the ocean. The others are the (1) *Hálahála* or *Kálákúta* poison which gives his name of Nilákantha to Siva; (2) Váruni or Sura, goddess of wine; (3) the white-eared horse of Indra, Uchchaihshrava; (4) *Kaustubha*, the jewel of Vishnu; (5), the cool-rayed moon; (6) the sage Dhanwantari, clothed in white, with the *amrito* in his water-pot; (7) the goddess Sri; (8) the Apsaras; (9) Surabhi, the cow of plenty, the fountain of milk and curds, and (10) the *párijáta* tree "which is the delight of the nymphs of heaven: perfuming the world with its blossoms. This *párijáta* is one of the fine trees of Paradise and is identified with the *Erythrina indica* or 'coral-tree.' It is frequently mentioned in the Puránas. The Sáryáta are descendants of Vaivaswata. [4] One of the trees of Indra's heaven. [5] A celebrated sage, son of Angiras and husband of Tára, also the planet Jupiter and like Sarasvati presides over speech.

Bhrigutunga[1] and the Muni Bhrigu[2] and Sanatkumára[3] and other Devarshis and the Hátakesha[4] Siva-ling..

Then he took the Raja further into the caverns of Pátála and shewed him the roads to Swarga and Ganesha; and the Siva-ling of Sateswara and the earth resting on the head of the Serpent Ananta and the Siva-ling of Saureswara and Párvati. Then he shewed him Pátála-bhubaneswari Devi, and near her the Bágísha and the Baidyanátha Siva-lings, and on the left of them hidden by a rock the Gananátha-ling. Below again he shewed him a cavern into which he looked and saw a light shining like an emerald (*marakata*) in it were the Munis absorbed in religious exercises and there in the midst sat the Muni Kapila[5] and the Siva-ling of Kapilísa and the dwellings of the Dánavas and Daityas, and by this road he transported him in an instant to Ujjain[6] and shewed him there the river Sarasvati and the Siva-ling of Mahákála. Then in another instant they were back in the cavern and there Seshnág shewed the Raja the cave of Sukshma and in it was Ganesha, and the forests of Kadalivana[7] and the Muni Márkandeya.[8] Then they returned to the cave of Pátála-bhubaneswara; and he showed him another cave through which goes the road to Setubandha-rámeswara,[9] and in it he showed Chandra-sekhara.[10] This cave was forty *kos* long and forty *kos* broad, and its sides were formed of emerald; thence in a moment they returned from Rámeswar into the cave of Pátálabhubaneswara and entered another cave through which they went to the river Godávari and bathed in it, and another cave through which they went and bathed in Ganga-ságara and worshipped at the Siva-ling of Chandeswara.[11] In one of the caves Seshnág showed the Raja the *asrama* or hermitage of Márkandeya Rishi and the five Siva-lings of the five Kedáras. In another cave he showed the Raja the road to Baijnáth;

[1] The peak of the Rishi Bhrigu near Pokhri in patti Bherang where there is a cave from which comes a wind. [2] One of the ten Mahárshis named in Manu and father of Sri or Lakshmi by Khyáti in one of her births previous to the churning of the ocean. Called also lord of Lakshmipura on the Nerbudda known as Bhrigu Kachcha. [3] 'Always young,' one of the sons of Brahma. [4] *Náuka*, 'goiden'; name of a Siva Ling on the Godávari. [5] Name of a sage, the founder of the Sankhya philosophy. [6] In Málwa. [7] Kadaliban, 'plantain-grove,' a forest in the Dakhin celebrated for elephants. [8] The narrator of the Márkandeya Purána. [9] The Siva Ling at Rámiseram, at the bridge from the continent to Lanka, set up by Rama: see Wheeler, II, 353. [10] 'Moon-created,' an epithet of Siva, also the name of a mountain. [11] Chandi, another name of Párvati.

and the Siva-lings of Nílakántha and Bali,[1] the king of the Daityas.

Then in the great cave he showed him the cave of Brahma-dwára[2] and its Siva-lings and there worshipped Kámadhenu[3] from whom falls down the milk on Mahádeva. Here there is a pool called Siva-*kunda*, the water of which if any one drinks without permission from the deity, he is struck with the trident of Siva. Then the Raja asking permission of Mahádeva, drank at the pool and Mahádeva said to the Raja—'Within this space thirty-three krores of gods remain in attendance on it.' Then Seshnág showed him the moon and stars and the Ganas and Gandharvas and the great Mahádeva-ling, on one side of which sits Brahma and on the other Vishnu. These three gods dwell here in one shape as the Siva-ling of Bhubaneswara. Then in the cave of Smara he saw Mahádeva throwing the dice with Párvati and the other gods standing by adoring. Then he saw another cave, ten thousand *yojanas* in circumference, at the door of which sat a guardian snake. This cave was lighted with the light of jewels, and in the midst was a house made of precious stones, and in it a bed of the same, and on it, on stuffs as white as milk, sat Briddha-bhubaneswara, Mahádeva and Párvati. Then Seshnág took him through another cave to Kailása and the Raja bathed in Mána-sarovara. Then they came back and they showed him the cave of Smeru where was Siva sleeping with matted hair on his head, and wearing the skin of a tiger and having a snake as a *janeo*[4] and near him Ugratára Devi,[5] and he showed him the cave of Swadhama and the Raja asked—'What is the light that flows forth from the midst'? and Seshnág answered—'This is Tejomáya Mahádeva[6] tell it not to any one; from this light sprang forth Vishnu, Brahma, and Siva when the universe

[1] Bali was the son of Virochana, son of the great Daitya Prahláda. He conquered Indra and the other gods and was, in turn, vanquished by Vishnu in his Vámana or dwarf incarnation and sent as ruler to Pátála: see page . [2] Now called Brahma-kanthi, a small cave branching out from the great cave. [3] The cow belonging to Vasishtha which yields all desires, here represented by a rock somewhat in the form of a cow from which water trickles on to the top of the Lings. [4] The sacrificial thread. [5] The 'terrible goddess' as Siva is called Ugresa, the terrible lord. Rudra or Siva was born half male and half female, but separating himself into two parts by order of Brahma, each sex became multiplied and of two classes dark or fierce and light or agreeable. Hence the eleven Rudras and their wives. Ugraretas, Bhava, Kála are among the dark forms of the male and Durga, Káli, Bhaváni, Chandi, Maháratri, Ugratára, amongst the fierce forms of the female. Similarly Siva, Manu, Mahat are the agreeable forms of the male and Lakshmi, Gauri, Uma the mild forms of the female. [6] 'Whose form is light.'

was created, and from this light the whole world is enlightened. Look in the midst of it and you will see a form which is Vishnu the creator of the universe. He who understands the Vedánta and the Shástras calls this light Brahma. Not even the gods can come before this light: worship it. From this cave goes the road to Kedára.' Then they went to Kedára and worshipped the Siva-ling and drank at the spring of Udaka,[1] and they went to Mahá-pantha[2] and thence returned to Pátála-bhubaneswara. Then the Raja said in his own mind—'Am I mad or am I dreaming; what is this Pátála that I am seeing?'

Then Seshnág said to the Raja—'Take thou a thousand loads of jewels borne for thee by Rákshasas, and this horse, the speed of which is that of the wind and go to thy own home; but tell of Pátála to no one, and you and your family shall flourish. There shall hereafter be a Brahman called Batkala who shall tell of this cave to mankind, then they shall know of it.' Then the Raja mounting on the horse came forth with the Rákshasas carrying the jewels and thanked Seshnág; then he went to the mount of Dárú and on the banks of the Sarju he found his army who were searching for him, and he returned to Ayodhya and stored up the jewels in his treasury and dismissed the Rákshasas who had carried them. Then the Raja called his Ráni and his sons and told them all that he had seen and divided the jewels among them. While he was telling of the wonders of Pátála the messenger of Mahádeva came and seizing the king carried him off to the dwelling of Siva. He who shall hear this history of Raja Rituparna and this *máhátmayá* of Pátála-bhubaneswara all his sins shall be forgiven and he shall enter into the paradise of Mahádeva.

KEDÁRA-KHANDA.

Kedára-khanda.

The Kedára-khanda section of the Skanda Purána occurs in the same form as the Mánasa-khanda and opens with the usual philosophical inquiries as to the origin of things of which the following may be taken as a specimen:

"This is related by the Súta Sanaka and other rishis. First the Rishi Sanaka asked:—"What is Brahma?" he is without the three qualities,[3] *i. e.*, without

[1] Now called Udak Nauli. [2] The peak above Kedár. [3] *Niryuna*, 'without the three *guna* or qualities,' an attribute of the Supreme being.

sattwa[1] or *rajas*[2] or *tamas*:[3] he is *satya*[4] and *jnán*[5] and *anand*[6]: he has neither name, nor class, nor senses, how then shall he be discovered or understood? and how from this Brahma without qualities did the world proceed?" The Súta answered and said:—"Vsaishtha Muni,"[7] the son of Brahma, told this to his wife Arundhati: she asked, "You know all things, the universe proceeded from Brahma, how shall he be discovered? and in the Káli *Yug* when men cease to perform due worship and believe not, how shall they obtain release, and how was the world created, and what are the duties of the four classes, and how many are the *manwantaras*[8] and *Yugas*? Vasishtha answered and said: "This question was asked by Párvati from Mahádeo, and he answered thus: "He is without form or senses or colour, nor does he perform any work; he is not created nor does he resemble any created thing; he is joy; he is without master; he is the soul of the universe; he is without colour, neither white nor black nor red nor yellow, nor of all colours mixed together; he has neither body nor form, yet there is nothing in the universe in which he is not. He neither performs any acts nor does he sleep, nor has he any senses. What the Supreme Spirit really is, neither Brahma nor the gods can tell. He is without qualities: without beginning, middle or end; without visible form or any form, separate from all things, yet pervading all things. The followers of the Sankhya call him *purusha*, the Vedantists call him *gyán*, the Dwaitabadi of the Nyáya call him *jiva* and *brahma*. The followers of the Mímánsa call him *Karma*, whilst those who hold with Patanja'i address him as *sahesvara*.[9] The Saivas say he is one with Siva, the Vaishnavas that he is Vishnu, the Sauras that he is the sun, and the Sáktas that he is the *Sakti*. I Mahádeo alone know something of him, but not all; he is without the qualities of stability, activity, or stagnancy; he has neither beginning nor middle nor end; he is not perceptible by the senses; he is without bodily form, yet everything in the universe bears his form: he had no beginning; he is above and beyond all things. The followers of the Sankhya call him *purusha*; the Adwaitabadis say of him that he cannot be seen with the eyes, yet he pervades all space; he is all-powerful and everything is and has its being in him. The followers of the Nyáya say that he is *jiva* and *brahma*, matter and spirit. Those who adopt the Mímánsa system declare he is *karma* or works, whilst the followers of the Yoga Shástras[10] declare he is abstracted meditation. The Saivas say he is Siva; the Vaishnavas that he is Vishnu; the Sauras that he is Surya: the Gáneshas that he is Ganesha, and the Sáktas that he is Sakti. The Supreme Spirit, O Párvati, whence this universe arose was water, the depth, length and breadth of which no one can tell; in which are millions of Brahmandas[11] and Brahmas[12] of various forms. In every Brahmanda are the three gods, Brahma, Vishnu and Siva and Indra and the other gods and each has its separate seas and rivers and mountains. He is eternal, his face is turned to every side and in these Brahmandas there is still the all-pervading spirit. This water of the Supreme

[1] Goodness, knowledge, quietude. [2] Activity, passion. [3] Darkness, stagnancy. [4] He who is truth. [5] Or Gyán, he who knows. [6] Joy. [7] Urja or 'energy' is the usual name of the wife of this Mánasaputra or mind-born sage. [8] Periods of a Manu, each of which comprises seventy-one *Yugas* or ages and is ruledover by its own Manu and sages. Six *manwantaras* have passed and we are now in the seventh under Vaivaswata Manu. Seven more have to come before the day of Brahma is completed: see further Wilson's works, VI., 45. [9] Reference is here made to the schools of philosophy. [10] Followed by Patanjali. [11] The mundane eggs, the embryos of worlds. [12] The active principle of creation.

Spirit which is outside the mundane egg once came into the world and this is Ganga."

Párvati then asks Siva to tell her how this came to pass and how the egg was formed. Mahádeo answered and said: "Listen, O daughter of Himáchal, to the history of Vishnu. First there was only water in the universe, in which floated Vishnu on a bed borne on the serpent Seshnág. This was when the former world had ended and Vishnu determined that a new world should be created. At the thought, there sprang from his navel a lotus and in the lotus was born the four-faced Brahma.[1] Then Vishnu said, 'Create the world.' When Brahma heard the words, he listened and saw Vishnu and said: "Thou art the chief of the gods; thou art unaffected by any thing; thou art without form visible or invisible; thou hast neither beginning nor end. Siva and the other gods cannot tell who thou art, much less can I duly adore thee. I am a child and without knowledge, and my mind is overwhelmed with ignorance, how then can I fitly glorify thee? Where are thy hands and thy feet and thy limbs, where art thou thyself? This much only can I perceive that thou art this ocean with the waters of which thou cherished all things animate and inanimate. Every created thing depends upon thee; thou art the light of the sun and the moon and the stars through which darkness is driven away from the world. Thou art wind and the breath of life and ether above the world; thou art time and its divisions and the senses and mind. The body[2] is the chariot, the soul[3] is the master within and the mind[4] is the charioteer; the bodily faculties are the horses and the senses are veins. The charioteer must be vigilant or the chariot will be upset. Thou art perfect, pure and unchangeable. Until thou hadst formed the thought of creation, until then thou wert the Supreme spirit, neither creator nor created: When thou hadst performed this wish then thou becomest creator and created." I am powerless, how shall I create the world?; Vishnu answered and said "Brahma became the creator (*prajápati*) of the universe. I give to thee all knowledge; create the universe and live until creation has perished. I am pleased with thy adoration of me, so ask of me whatever boon thou desirest." Brahma answered and said: "Thou hast created me; I will create all things; I have received from thee all knowledge, what more can I ask for myself? but I will ask one thing and that is that thou wilt be pleased to remain in this world which I shall create." A great part of the above description has been borrowed more or less closely from the older Pauránik writings, and is followed by the usual description of terms of time, the origin of the gods, demons, Dánavas, Daityas, Rákshasas and Yakshas. Then comes the story of the heroes of the lunar and solar races, and the exaltation of the Bhágirathi as the principal source of the Ganges with some account of the various places of pilgrimage along its banks.[5]

Creation.

[1] *Chaturmukha.* [2] *Vigraha.* [3] *Atma.* [4] *Manas.* [5] I have had two manuscripts of the Kedára-khanda, one lent me by Ganga Datta Uprethi of Srinagar, and the other by Dharmanand Joshi of Almora. The latter which was copied in 1816 A. D., has been followed throughout. The topographical account of British Garhwál commences at the 41st chapter and 48th page. The entire account is filled with stories illustrating the holiness of particular places like that of Pátála in the Mánasa-khanda. I have omitted nearly all these stories, so that this account is little more than an index to a portion of the Kedára-khanda.

Kedár.

The *máhátmya* of Kedár follows the description of the valley of the Bhágirathi. Párvati asks what is Kedár and what are the fruits of visiting its sacred places and bathing in its holy waters. Mahádeo answered and said : 'The place that you have spoken of, O goddess, is so peculiarly dear to me that I shall never leave it nor forsake it. When I or Brahma created the universe, Kedár so pleased me that it shall ever remain sacred to me. Brahma and the other gods are there, whoever dies there becomes one with Siva. Such as thou, Vaishnavi, art amongst Satis, Hari amongst the gods, the ocean amongst lakes ; the Jahnavi amongst rivers, this peak amongst mountains, Yájnavalkya amongst Jogis, Nárada amongst Bhaktas, the Sálagrám amongst stones, the groves of Badari amongst forests, Kámadhenu amongst kine, a Brahman amongst men, the Brahman who can impart wisdom amongst other Brahmans, the wife who honours her husband amongst women, the son amongst children, gold amongst metals, Shuka amongst saints, Vyása amongst sages, this country amongst other countries, a prince amongst men Básab (Vásudeva) amongst the gods, the giver of good fortune amongst mortals, my city amongst villages, the Apsaras of heaven amongst dancers, Tunvara amongst Gandharvas, so is Kedár-kshetra when compared with any other sacred place. Mahádeva then relates the old story ; how once upon a time a hunter came here to this part of the Himálaya and after killing a large number of deer wandered northwards to Kedár where he found a number of holy men assembled and engaged in devotions. The hunter sat down at a respectful distance to watch their proceedings when suddenly a deer of a beautiful golden hue sprang up near him and walked gently by. The hunter prepared his bow to shoot the deer but before he could draw the string, the deer had disappeared. Disturbed at this he walked onwards and met Siva armed with a trident, with matted hair, wearing a garland of serpents and accompanied by his train. Frightened at the sight, the hunter concealed himself and the procession passed on. The hunter next met the sage Nárada from whom he learned that Kedár was a place of such sanctity that strange occurrences continually took place and portents and omens appeared, and that if any one desired salvation, he should find it there, though his sins were as great as can be

imagined the virtue that accrued from a visit to Kedár was sufficient to cleanse them.

Mandákini valley.

Mahádeva then gives a brief account of the places of pilgrimage around Kedár. On the lower course of the Mandákini[1] is the holy Siva-kund[2] where is the Kápila Siva-ling, and above this is Bhrigu-tunga, king of rocks. Still higher up at a distance of two *yojanas* is the babbling fountain of Hiranyagarbha,[3] and to the north of this the great Sphátik-ling. A few paces to the east is the Bahni-tírtha[4] near which is a well where Bhím Sen[5] worshipped me, Mahádeva. Above this is Mahápanth[6] four *kos* in circuit abounding with milk and ghi, where the gods dwell, full of gold and jewels and birds with shining wings. Above Mahápanth is the Swargarohini pahár.[7] At the junction of the Mádhvi[8] with the Mandákini is the Shiuprad-tírtha and where the Kshírganga[9] joins the same river is the Bráhmya-tírtha. To the south of this is the fountain known as Samudr-jal, which is of such purity that whoever even touches its water receives some benefit. To the left is the Purandar peak, where Indra worshipped Siva and where is the Madhálaya-ling. About forty cubits thence is the Hans-kund where Brahma appeared as a *hansa*, and near it is the Bhím Sen *sila* where is the bed of Siva. About six *kos* thence to the south is the Gauri-tírtha where the water is warm and the earth of a yellowish-red colour. Here Gauri bathed whilst her courses were on her and here is the Gaureswar-ling. Whoever smears the mud of this pool on his body, bathes in its water and makes an offering however small shall receive an eternal reward. To the south is Goraksh-áshrama[10] where also there are hot springs and a *ling*, and if any one remains there for seven days, his sins are all forgiven. On the same hill are four pools called Devika, Bhadrada, Shubhra, and Mátangi, bathing in which ensures particular benefits. On the hill

[1] This river flows through Patti Maikhanda from the glacier above the Kedár temple. [2] There are several pools of this name, but this is perhaps the one at the confluence of the Madh and Mandákini streams. [3] Gauri-kund. [4] Same as the Agni-tírtha near Gauri-kund. [5] Now known as Bhím Udiyár, there are a number of caves here. [6] The mountain and glacier above the temple. [7] The group of peaks above Mahápanth. [8] To the east of Nalapatan. [9] Apparently one of the streams which form the head-waters of the Mandákini for hence we descend the valley again to Gauri-kund. [10] "Here is the Shesheswar-ling and in the pool near it are numerous snakes who do no harm to those who bathe in it." These snakes occur in the pools at Triyugí and Gauri-kund.

above Gauri-tírtha is the Chírbása Bhairab who acts as watchman to Mahádeva, and who must have offerings of strips of cloth when his lord is worshipped. Káli also resides here and about a *kos* off is Bináyak-dwára[1] sacred to Ganesha. Within the Kedára-mandal and to the west of the Tribikram Nadi[2] is the Náráyan-tírtha. About a *kos* and a half above is the Náráyan-kshetra where fire always burns. This is the place where the wedding of Gauri Sankara and the daughter of Himáchal took place. Here is the Saraswati-kund and the Brahma-kund, the water of which is of a yellow colour and harbours snakes. To the south is the Bishnu-tírtha and the Jaleswar-ling and the holy Harida stream.[3]

Bhillang valley.

Mahádeo then praises Bhilla-kshetra[4] saying: 'Here I played with thee, O goddess, disguised as a Bhíl. The hill is lovely and well wooded and watered, and from it you can see Ganga, and here is the Bhilleswar-ling. Here I still engage in sport with the Bhíls, clad in a dark-coloured blanket, I wander about the hills at midnight'. Close by is the temple of Kámeswari Devi and less than a *kos* above it, the Surasuta stream where Siva smeared his body with ashes. On the south bank of the stream is the Mátalika-sila. The extent of the Bhillángan-kshetra is five *yojanas* long by four *yojanas* broad, and it contains some sixty streams. To the south of Bhillángan-kshetra is Bagala-kshetra[5] which extends two *yojanas* in breadth and four *yojanas* in length. It contains numerous places of pilgrimage and temples and that sacred to Bagala Devi is well-known. To the south of this temple is the Punya-pramodini stream and on the northern bank of the stream, a figure of the four-armed Vishnu and, about two *kos* to the south, the temple of Trishírkha Devi. Next comes Shákambhari-kshetra[6] sacred to Shákambhari Devi where her temple exists. She protects the sages in their devotions and here is a grove of *Sháka* trees and the tigers of the forest and the snake with the jewelled head pays her worship. Near it is the Sankara peak where the feast of lamps takes place on the eleventh of the dark half of Kárttik. To the south

[1] The confluence of the river from Triyugi with the Mandákini. [2] The stream which flows by Triyugi-Náráyan; the Sini of the maps. The fire has lasted here for three ages, hence the name Triyugi. [3] The Sinigadh of the maps and Jalmal of some travellers. [4] The valley of the Bhíllang river in Tihri to the west of Triyugi. [5] In Tihrik [6] In Tihri.

of the peak is the Márakata-ling surrounded by a hooded snake, and to the left of this is the Nandini river and the temple of Ruru Bhairab adorned with numerous bells, the hermitage of Shukra and mines of copper.

Madh and Tung.

Mahádeva then goes on to say that there are five *kshetras* which every one should visit, Kedár, Madh, Tung, Rudrálaya, and Kalp, all of which are within the Kedár-mandal. A Gaur Brahman is next introduced to tell a story in praise of Madhmaheswar. Here is the sacred Sarasvati-tírtha regarding which the story of the hunter Shambuka is told to show its surpassing sanctity. The hunter and his dog followed the chase until they came near Madh where they met a joyous band of pilgrims singing the praises of the Sarasvati. The hunter cared naught for this and threw his dog into the pond and the dog on coming out shook off some of the water on to Shambuka, but such was the virtue of even this partial ablution in the sacred stream that on their death both hunter and dog were summoned to Siva's heaven. The Tungeswar-kshetra is next mentioned and is said to be two *yojanas* square, and its praise is sung in the story of Dharmdatta and his son Karmsharm. Dharmdatta was a good and pious man, but his son Karmsharm was a gambler and bad character and even induced his own sister to become as bad as himself. Dharmdatta died of a broken heart and his son seized the property and sold it, and squandering the proceeds took to highway-robbery as a profession. Meanwhile his sister turned courtesan and in her travels fell in with her brother and became his mistress. The brother was in the end killed in a forest by a tiger, but a crow took merely one of his bones and carried it to Tung-kshetra where it fell within the sacred tract, and such is the power inherent in the soil of these holy places that Karmsharm after some time spent with the Rishis was transported to the heaven of Siva.

This brings us to the Akáshganga[1] which finds its source in three springs on the summit of Tungnáth. To the west of Tungnáth is a Sphátik-ling[2] and to the south of this the Garur-tírtha

[1] Argáskámni and Agaskamnee of the maps which takes its rise below the temple to Siva as Tungnáth on the Chandrasila peak. [2] A white *ling*-shaped boulder sacred to Siva.

and about half a mile thence the Mán-sarovara, in which the lotus grows. To the north of the Mán pond is the temple dedicated to Siva as Markateswar,[1] and to the south of this near the hermitage of Mrikanda, the temple of Maheswari Devi. The sources of the Akáshganga is the best of all places for performing the funeral rites of ancestors.

Rudranáth.

The Rudrálaya or the 'abode of Rudrá' is also called the Mahálaya or 'great abode,' and is introduced by Mahádeo with a long account of his own power and greatness which we omit. Here is the Baitarani stream[2] sacred to the ancestors where one *pind* equals a *kror* offered at Gya. Here is Shiumukh, the head of Siva, and the place where the Pándavas came to remove the sin of killing their brethren, but Mahádeo showed them not his face, and going to Kedár they obtained a sight of his hinder parts and so obtained salvation. At a distance of half a *kos* is the Mána pool, the waters of which are of a yellowish-red colour, and to the east of this is the Sarasvata pond in which lives the fish called Mrikunda and to the east of the pond a great *ling* in colour and form like a coral bead. On the fourteenth of the dark half of the month, the fish in the pond are fed and oblations are offered for the repose of the *manes* of ancestors. To the north-east is the pool with yellow waters where Mani Bhadra worshipped Siva. Kalpethal[3] is the place where Durvása Rishi performed austerities beneath a *kalpa* tree and thus obtained salvation. To the south of the Kalpeswar-ling[4] is Kápila-ling and below it flows the Hairanvati stream, and to the south of it is Bhringeswar about two *kos* from Kalpeswar. Here there are also hot springs and some distance near them to the west is Gosthal-kshetra,[5] when Mahádeva is worshipped as Parmeshwar (Pasupati) and an iron *trisul* or trident stands near his temple and an ever-flowering tree of great beauty. To the east Mahádeva resides as Jhasha-ketana-ha (or destroyer of Kandarpa, the god of love), after which his wrath being appeased by Rati, he became known as Rateswar and a pond near his temple[6] is dedicated to Rati.

[1] In Mako village where the priests of Tungnáth reside during the winter. [2] The Kudrigadh of the maps which flows through the valley in which is the Rudranáth temple. [3] Patti Urgam. [4] In Urgam village. [5] Gothala in Malla Nágpur where is the Gopeswar temple and the iron trident. [6] In the valley below Gopeswar.

Badarináth.

The account of Badarí is given in a conversation between Vasishtha and his wife Arundhati. The holy circle of Badarí includes the entire tract (*kshetra*) between the hermitage of Kanwa and the peak of Nanda. Such is the efficacy of austerities performed there that oblations offered at Kanwa's shrine frees even thieves and the slayers of kine and Brahmans from the just punishment due to their sins. To him who bathes at Nandprayág and worships Rámapati there, further benefits are promised. The circle of Badari is three *yojanas* broad by twelve *yojanas* long, and contains the Gandhamádana, Badari, Nar-Náráyana and Kuvera peaks besides numerous streams and warm springs.

Patti Dasoli.

Nandprayág[1] is so named after the virtuous Raja Nanda who here made a great sacrifice which was attended by the gods and many Brahmans. Here is the Vasishtheswar-ling and to the north of it the sin-cleansing Brihika and Birahwati.[2] The latter is sometimes called the Kalyáni and received its present name from the austerities performed there by Siva himself. Here is a temple to Siva as Bisheswar, and to the east thereof the sacred pool of Manibhadra,[3] and to the south of this the Mahábhadra[4] stream, remarkable for the great fig-tree on its bank and the Súrya-tírtha. Two *kos* to the east is the temple of Gopeswari Devi where Raja Danda of the solar race performed austerities, hence the synonym Dandkáranya.

The valley of the Alaknanda.

On the north bank[5] of the Alaknanda is the Bilvesvar temple surrounded with *bel* (*Ægle Marmelos*) trees with fruit as large as cocoanuts and smooth as jujubes. To the south of the river is the Garur-ganga, the stones of which have the power of removing the poison from snake-bites, and its yellow mud when smeared on the body imparts wisdom like Ganesh. To the north of the Alaknanda is the Charmanwati[6] stream where is the hermitage of Raja Anant Sri and a temple dedicated to Chandi Devi and on the Mecha peak

[1] At the confluence of the Nandákini and Alaknanda. [2] The Bireh Ganga. [3] The Mahádeo lake in patti M. Dasoli. [4] In Malli Dasoli flowing from the Bhadra peak. [5] The description now follows the Alaknanda up to Badrináth. [6] Now the Mena stream in Urgam.

a *ling*. To the north-east is the Gaurya hermitage where Devi subsisted on the leaves of the forest trees for a thousand years and gave the tract its present name Parankhanda. On the banks of the Alaknanda near the hermitage are a *ling* and pool known as Śiva-kund. About a mile beyond is the pool Bishnu-kund, and two *kos* farther is Jyotirdhám[1] in which is the temple of Narisingh where Prahlád performed austerities. Here are also the pools known as Brahma, Bishnu, Siva, Ganesh, Bhringi, Rishi, Surya, Durgu, Dhanada, and Prahlád-kund, Nárada worshipped Vishnu at Bishnu-kund. From Jyotirdhám the traveller proceeds to Badari, and the Gandhamádana, peak by the confluence of the Dhaula and the Alaknanda (Ganga) near which are the pools already mentioned. The place is called Bishnuprayág and above it is the site of the hermitage of Ghatotbhava who became the watchman of Vishnu. Here there are hot-springs and the temple dedicated to Siva as Muneswar and one to Ghantakarn. There are numerous hermitages of holy men around and every pool forms the source of a stream and every peak the home of a god. Above Bishnuprayág is Pándusthán[2] where the Pándavas lived for a time engaged in devotion. Here is Pándvesvar Mahádeva. On the right bank of the river is the Nar peak with its thousand *lings* and places of pilgrimage and the Náráyan-kund. Next comes the Bindumati stream and two *kos* beyond is Bhaikhánas where the saints performed the *hom* sacrifice. Above this on the summit of the peak is the Jageswar Bhairab and the Kuvera rock. Then comes the Pravara stream and the temple of Badari where is the Kúrm-dhára and the five-rocks (*Panch-sila*), *viz.*, Náradiya-sila, Báráhi-sila, Nárasinhi-sila, Márkandeya-sila, and Gáruri-sila, with their respective pools. Within the circle of these rocks is the throne of Vishnu. Here also is the Bahni-tírtha and the rock Brahm-kapál sacred to the *manes* of ancestors. Close to Badrináth and near the sources of the stream is Nrisinh in the form of a rock and the Náráyan-kund. A little less than a *kos* to the west is the Urvasi-kund where dwelt Pururuvas and Urvasi and two *kos* off is the Svarna-dhára, and on the banks of the river the Shesh-tírtha. To the left of Badrináth are the Indra-dhára, Deodhára, and Basu-dhára streams, the Dharm-sila and the Som, Satyapadam, Chakra, Dwádasáditya, Saptarshi, Rudr, Brahma,

[1] Joshimath. [2] Pándukeswar, where the temple still exists.

Nar-Náráyan, Byás, Keshava-prayág, and Pándavi-*tírthas*, the pool of Muchu-kunda and Manibhadra.

Episodes.

Some twenty chapters[1] devoted to stories in praises of the various *tírthas* now follow which may be dismissed after a very brief notice. Arundhati asks her husband to tell her something more about the great places of pilgrimage than their mere names, and he goes on to relate to her what he professes to have heard from Nárada regarding them. These stories show that whatever may be a man's desire he will obtain it by worship at Badari, and whatever may be his sins they will be forgiven if he supplicates the deity through the priests of Kedár and Badari. The first story tells how "Once upon a time there lived a very learned and pious Brahman named Bishnumana on the banks of the Drishadwati. Though the father was learned and good, the son Bishnurati grew up so ignorant and debauched that Bishnumana was obliged to expel the bôy from his house. Bishnuvati joined a band of wandering musicians and came to Badari where he sang the great song in honour of Vishnu, and so pleased the god that he was allowed to live near Náradakund, and the sufferings which he had gone through in his travels were held sufficient punishment for the evils that he had wrought." The next story tells how Sankara Vaisya, a resident of Pratisthánpura,[2] longed for issue, and hearing of the virtues of a journey to Badari went there with his wife. There he found a number of Brahmans engaged in devotion, and after feeding them explained his object, and in return received from them a charm which he gave to his wife, who soon became pregnant, and in due time brought forth a son who was named Dharmadatta. When Dharmadatta grew to man's estate, and proceeded with his merchandise into strange lands, he became enamoured of a daughter of the Mlechchhas, who eventually plundered him of all his property. Dharmadatta returned to his father, who ordered him to make the round of Kedár and Badari in order to cleanse him of his sin. Next we have Janamejaya slaying eighteen Brahmans in order to enjoy the society of a beautiful woman that he met out hunting, and cleansed of his sin by a visit to Badari and the intercession of Vyása.

[1] From the 58th to the 78th on the Godáveri.

[2] Pratisthána is probably Paithan

Chandragupta Vaisya, a resident of Avanti (Ujjain) had ten sons, and was one day visited by a Badarináth *panda* by name Dharmadatta, who was asked to describe all the wonders of Badari. In reply Dharmadatta told the Vaisya the names of all the places of pilgrimages, and the advantages to be had from visiting them ; that he should take all his property and go to Kedár and Badari, and give it to the Brahmans there, who would ensure his admission to paradise. Accordingly Chandragupta with his wife and sons sat off on a pilgrimage with Dharmadatta, and afterwards remained with him near Badari. Whilst there Chandragupta's wife lost a precious ivory ornament one day, and inquired from the sages who lived near what was to be done to recover it. They answered that she and her family should go the round of the places of pilgrimage again, and when this had been accomplished, and they had arrived a second time at Badarináth, the elephant from whose tusk the ornament had been made appeared, and with the whole party was at once conveyed to the paradise of Vishnu. Then comes a story of how Nárada standing on one foot sang the praises of Mahádeo for one hundred years at the confluence of the Mandákini and Alaknanda, now known as Rudrprayág, and how he was visited by the great god himself who here invented the musical nodes used in his worship. Then follows a long explanation of the various *rágs*, their use, value, authority, accompaniments, rules, divisions, *&c.* In illustration a story is told of Devásraya who had five sons, all of whom were learned and pious except Gopálsharma, who was so ignorant that he was denied the sacrificial thread, and was appointed as cow-herd. Gopál when he became of age reflected on his condition, and sought for those to whom he belonged, and for this purpose travelled to Kailás, and visiting the various holy places arrived hungry and tired at Rudrprayág. Some days afterwards whilst wandering about the sacred place he overheard a Brahman performing his devotions and saying "*Om siváya námah*" as the great compelling invocation to the deity. Gopál immediately commenced repeating this simple litany, and when he had continued muttering the name for some hundred-thousand times, Siva took pity on him and revealed to him his origin and restored his faculties. Henceforth Gopál Siddh became known throughout the whole of Kedár as the favorite of Siva. The Brahmans who had

refused to partake of the feast prepared by Parasuráma were still under the curse pronounced by that sage and were known as Brahmarákshasas until restored by Gopál.

Nilkanth and Pindar.

Arundhati then asks whether the intercession of any other holy man has ever resulted in the release of such numbers as were saved through Gopál. She was told that the Nílkanth mountain lying between the peaks known as Shumbha and Nishumbha was the site of the great austerities performed by Rája Antideva, by virtue of which both the Rája and some thousands of Rákshasas were received into the heaven of Siva. The place is further marked by a temple to Mahisháni Devi. An account is next given of the Chakrakshetra which lies to the south of Mánasa and is known by the great *bel* tree and the temples dedicated to Bilweswar and Gáneswari Devi, the Heramb-kund and Bainuwa-tirtha. To the east is a temple to Chandi Devi and east of this a pool of yellow water and above it is Bikata-kshetra, so called from the son of Jambha Asura. Jambha had two sons, Bikat and Tat; the first adored Siva and the second Vishnu, and here is a temple dedicated to Siva as Bikateswar. Here is the Sailodak spring, the waters of which if applied to the eyes enable one to see where treasure is concealed. Here also is the Nandeswar temple. Tat-kshetra[1] lies along the Pindar and is the place where Tat with his Daityas performed austerities, and above the site of his hermitage, in a forest surrounded by *bel* and other trees, is a temple dedicated to Siva as Brahmaputreswar. A little more than four *kos* to the north of the Brahmaputrasthán is the Pushkara peak where Pushkar and the Nágás worshipped Siva. Next comes the Muni-siddhini-kshetra, full of deer, trees, flowers, and birds, where Pushkar-nág lives. To the south-east is the temple of Chandika Devi and the Táreswar *ling*. To the south of this is the Káveri stream, where is the Kávereswar *ling*, and further south the Nág-dhára and Nigamálaya with the stream Páphára, where Dwípeswar, 'lord of the Isles,' died. The Jaleswar *ling* is

[1] The Tat-kshetra must occupy the greater portion of Pindarpár. I would place the Brahmaputra sthán in the Wán valley and the Pushkara peak might be identified with one of the spurs of Trisúl. There is still a temple to Sangal-nág at the confluence of the Kailganga and Pindar rivers at Talor and one to Bhekul Nág at Ratgaon and to Bánpa-nág at Margaon in Painkhanda. We next have the valley of the Kailganga, and then that of the Pindar, after which the tract around Karn-prayág called Siva-kshetra is reached.

within this tract and also a temple to Jaleswari Devi and four *kos* to the east the Benu-tirtha on the banks of a small stream. To the north-east of this stream is the Dandeswar and Mahágánapati temples and also one sacred to Bhairab. To the south-east of the Brahmaputrasthán is the Gobind-tírtha at the source of the Pindar river, and the temple dedicated to Bírsháni Devi. To the north-east of this temple is Binateswar, and further south is the Bishumiti-kshetra and the Bisheswar temple and pool. North of these is Gana-kund, the Saumyeswar temple, Kambha-kund and Dasamauli, where Rávan repented him of his evil deeds, and here also the Rávaneswar *ling* is established. Here is the Saudámini stream and on its banks the Sukameswar *ling*. North of the river is Kapila-tírtha, Kapileswar, Yogeswar, Bágeswar, Brahmeswar, and a temple to Ganesh. At the confluence of the Pindar and Alaknanda is Siva-kshetra, where Karna performed austerities. Here are temples dedicated to Uma and Umeswar, the Bináyak-sila, Suraj-kund, the Dhananjaya Nág temple and the Ratna-prabha *ling* with its golden *yoni*. Close by is the Menukeswar temple, the Hivani stream and Pulaheswar *ling*, near which is the Brahma-sila of many colours. Above on the hill is the Manibhadra-kshetra and Maniwati stream, the Yaksheswar *ling* and sacred pool, Bameswar, the Dibeswar-kund where the lotus grows and the Debeswar *ling*. To the left of the Dibeswar *ling* is Svarnákarsthán, the Svarneswar temple, the Indra-tírtha, where Bhairab in a black form seized and bound Indra, the Indreswar and Káleswar temples and also the rocks known as Bhím-sila and Hanumat-sila. The last mentioned is of a white colour and has the power of transmuting the baser metals into gold. Beyond these is Bhím-kshetra, in which is the Bhímeswar *ling* and temple.

Káli-kshetra.

Two *yojanas* to the north of Káli-kshetra[1] we arrive at the temple of Rákeswari Devi which marks the site where Shasha, the moon, was freed from the leprosy caused by the curse of Brihaspati. It was in the Nandan woods that the moon met the wife of Brihaspati and debauched her and was cursed by the sage and became a leper. The moon then prayed to Siva and offered oblations here

[1] Káli-kshetra or Kálikasthán, also known as Kálbangwára, is the tract along the Káli near its confluence with the Mandákini below Kálimath.

and obtained forgiveness. Arundhati then asks where the Rájas paid their devotions, and in reply was told that they visited the Kedár-tírthas and Káli-kshetra on the banks of the Sarasvati. Siva is worshipped in Káli-kshetra as Káleswar and there is a great temple to Káli herself and to the east about two *kos* is the temple of Turana Mandana Devi.[1] To the north of the temple of Káli is the temple of Kot-máyeswari Devi. To the north of the river at the junction of the Barana and Asi streams is Saumya Káshi[2] now concealed (*gupta*) and only five *kos* in extent, but hereafter to be revealed when its sacred precincts will comprise one hundred *kos*.

Jumna, Tons, and Dehra Dún.

Jumna and Tons.

In the country to the west of the Ganges[3] are numerous places of pilgrimage, the Brahma-dhára and others. The Jumna flows through the north-western portion of this tract and the Hiranyabáku joins it and their confluence is holy. Still further west is the Tamasa,[4] and where it joins the Jumna is the Daksha-tirtha and north of it the Bishnu-tirtha.[5] From the hill above the last-mentioned place of pilgrimage flows the Bimuktida stream, and at its junction with the Tons is a temple dedicated to Siva as Jyoteswar. To the north is the Hem-sringa peak[6] from which flows the Siddha stream, and at its confluence with the Tons is the Siva-ling to which Brahma paid devotion. North-east of this are the Hiranya-saikata and Hemwati streams, and on the eastern bank of the latter stream the Kasyapa-tirtha. Further west is the Brahmaputra stream and on its banks the Brahmeswar-ling and the temple dedicated to Gáneswari Devi. To the north-west is the Satadru[7] river and on its banks the Panchnadeswar-ling, and west of this the Jambhu-sail, whence the Jambhu stream takes its rise. On the banks of the Jambhu is a temple dedicated to Bishhára Devi and beyond it the Kámdhára stream, an affluent of the Brahmaputra and at their confluence the Kámákhya-tírtha. From the Saundaryyák peak flows the Sundari river to its

[1] One with Mahisha-mardini, slayer of Mahish Asura. The story of Raktavíja is told at some length, how, accompanied by Shumbha and Nishumbha, he ravaged the country of Káli and how she slew him after he had conquered Indra and the gods. Kotimáyeswari Devi assisted by spreading delusions amongst the Daityas and also Kákeswari Devi, whose temple is about two miles above Kálikasthán.
[2] Now called Gupt-Káshi. [3] Includes western Tihri and Jaunsár-Báwar.
[4] The Tons river. [5] Near Kálsi in Jaunsár. [6] The Nága peak of the maps. [7] The Satlaj.

confluence with the Mokshawati stream called Sundar-prayág, where is a temple to Sundari Devi. At Bishnu-prayág is the confluence of the Punyavati with the Bishnu-dhára. Once upon a time the ocean came to the Himálaya and there worshipped Siva for many thousand years: hence the origin of the Samudra-tirtha. When Brahma created the world, the Tamasa was created from the Brahma-kund and its confluence is the Rudra-tírtha and Bishnu-tírtha, where is an image of Vaishnavi Devi and, half a *kos* beyond, the Sakra or Indra-tírtha. To the south-east of the Barana-tírtha at a distance of twelve *kos* is the Bálakhilya peak and river[1] and the Bálakhilyeswar-ling. To the north-east is the temple dedicated to Siva as Somesvar and from the hills around five rivers take their rise and afford numerous places of pilgrimage to the devout. One of the streams called Dharm has on its eastern side the Dharmkút peak where Dharm Rája performed austerities. To the south of this is the Siddhkút peak[2] and to the north Apsaragiri. To the north-east is the Yakshkút peak and to the south of this the Saileswar-ling. From the peak of Nanda to Káshtgiri the entire tract is known as Kedár-mandal, and within it are innumerable *lings*, all worthy of the highest honour.

Máya-kshetra and the Ganges valley.

From Ganga-dwára[3] to Ratnástambha and from the peak of Nanda to Káshtgiri is known as Máya-kshetra. To Brahmanasthán is twenty-three *yojanas*, between the Ganges and Jumna eight *yojanas*, Tiryak three *yojanas*, and Máya-kshetra twelve *yojanas*. Maya is Sati, the daughter of Daksha, who lived near Ganga-dwára, where is the Daksheswar-ling and the places known as Chandika-tírtha, Drona-tírtha, Ráma-tírtha. To see Rikhikesh[4] and Brahma-tírtha even ensures the fruit of good works. Tapuban[5] also is a place for performing the funeral rites of ancestors and Lakshmanasthán for achieving good fortune.[6] Then whoever bathes at Siva-tírtha attains to the heaven of Siva. Near Ganga-dwára is the Nila peak sacred to Siva as Nileswar. Near the Bilwa-tírtha is the Siva-dhára and a great *bel* tree and a *ling* near which Nárada Muni

[1] The Suswa Nadi in the Dún, regarding which the story of the pigmy Brahmans (*bálakhil*), is told. [2] Nágsidh in the Dún. [3] Hardwár. The description now leads us up the valley of the Ganges. [4] In Dehra Dún, on the right bank of the Ganges. [5] In Dehra Dún near Lachhman-jhúla. [6] Here follows some seven chapters describing Daksha's sacrifice. See Gaz., II., 283-290.

always dwells and the great Ashvatara Nág with a jewel in his head and who sometimes appears as a sage and sometimes as a deer. In a cave to the left lived the Muni Rishíka and here on the fourteenth of the dark half of Shráwan a light is seen and the voices of people talking are heard. About two gun-shots to the east of the temple of Bilvesvar is an excellent spring of water on the hill and below it a den of wild pigs. About a *kos* beyond is the temple and stream sacred to Brahmani Devi. About six *kos* from Bilwa-tírtha is the temple sacred to Siva as Trimurtteswar, near which is the Sunandi stream and the temple of Sunandeswar and the yellow stone known as Nandi-sila similar to the stone of the same name at Gaya and the *ling* called Nandeswar. A *kos* hence is the Bírbhadra tapasthal and the temple dedicated to Siva as Bírbhadreswar. About half a *kos* to the south are other pools and *tírthas* and *lings*. Next comes an account of Kankhal with numerous stories of its various places of pilgrimage, the Kusha-tirtha, Bishnu-tirtha, Samudra-tirtha, Siva-tirtha, Ganesh-tirtha, &c. To the north of Ganga-dwára the Kaumadwati stream joins the Ganges at Renuka-tírtha and about half a *kos* above the Bajra-sila stream. A *kos* to the north flows the Sankarballabha or Chakru stream and joins the Ganges where the temples dedicated to Siva as Sankareswar and Bírbhadreswar stand. Two *kos* to the west is the Sálihotreswar temple and, a short distance beyond, the Rambha stream which joins the Ganges at Rambheswar.[1]

Kubjámraka-kshetra.

We have next Kubjámraka-kshetra, where is the Kumud-tirtha, to the south of which is the temple dedicated to Siva as Chandeswar, and near it the Sárshav-tirtha, where every Sunday the Sun comes in the shape of a bee and bathes in its waters. More holy still is the Purnamukh-tirtha, where are springs of warm and cold water and the Someswar-ling, and near it are the Kárbír-tírtha and Agni-tírtha. Next comes the Báyavya-tírtha, the Aswattha-tírtha with its great *pipal* (*Ficus religiosa*) tree, the Básawa-tírtha and Chandrika stream and Ganapa Bhairab of terrible form. These are succeeded by the Bárábi-tírtha and the Samudra-tírtha with its variously coloured waters. To the north of Kubjámraka is the

[1] These appear to be in Tihri.

Rishi peak. Tapuban[1] lies to the west of the Ganges and is the place where Rámachandra retired to devote himself to religious austerities. Below it is the Bilama-tírtha where Seshnág of the white body and coal-black eyes loves to dwell. To the north-west of Ganga-dwára is the hermitage of Ráma, and Ráma-kshetra extends for sixteen *yojanas* from the Dhenu peak to the Betravati stream. Within this tract is the Kelikheti stream, on which are temples to Chandi and Durga and also the Ghantakarn-tapasyasthán. To the west of the latter place is the Bhuteswar-ling and the Kuhú stream and a great cave sacred to Márkandeya and other Rishis. There are also pools called after Ráma, Sita, and Hanumán, several lings and temples to Durga and Prabálika Devi. Drona-tirtha is near Deo-dhára where is the Deveswar-ling and the Deojanya stream. To the west is the Navadola stream and six *kos* north the Dhen forest and Dhen stream. To the east of these is Kákáchalsthán and west of it the Renuka stream. To the east of this is the Paryenkini stream and at the confluence of the two, a place of pilgrimage. The place where Dasaratha shot the crow in the eye is called Pushpeswar-deosthal and is within the boundaries of Kákáchal. Dronasthal lies to the east of Máya-kshetra and is held to be eight *yojanas* long and three *yojanas* broad.

Nágáchal and Chandraban.

To the south-east of Deo-dhára at a distance of about three miles is Nágáchal and to the west of it the Subhanshraba stream. Two *kos* to the west of the Deo peak is Chandraban, where there is a *ling* and sacred pool, and to the west of it the Chandravati stream and on its right bank the Bishn-pád. To the north-east is the Subahan stream and west of it about two kos a temple to Gankunjur Bhairab at the source of the Gan-dhára, whilst a temple to Chandika crowns the summit of the peak. To the north is the Svarneswar-ling and half a kos beyond the Deogarh stream which joins the Sankaraballabhá stream. To the west of Deo-dhára and on the other side of the Chandraban at a distance of about eight *kos* are the sources of the Jumna and Ganges with their numerous places of pilgrimage and sacred pools. The Chandreswar temple and pool and stream are all within the Chandraban.

[1] As already noted this place is on the Tihri boundary in Dehra Dún.

The Jumna and Tihri.

To the west of the Jumna is the temple sacred to Káleswar and Káleswari and the Deojushta stream which joins the Jumna. East of the Jumna is Yavanesbaryya's throne known also as Yavanesha-píth, four *yojanas* in extent. Within this tract is the Yoni peak, the Yoneswar *ling* and the home of Káliya Nág, and here in former times the Yavan Kál came to pay his devotions and hence the names Yavanesha-píth[1] and Káliya. To the south is the Brahma stream, and to the north the Rudra stream, and to the south of it the Bhasmamaya Páni with the white coloured rock honoured as a *ling*. To the east is the Bishnu stream and more easterly still the Ráma stream which unite at Bishnu-tirtha. To the west on the banks of the Jumna is the Shiu-tirtha, the Rishi-kund and Sharabhang-tírtha and the Vasishtha-tírtha on the Brahma stream. From the peaks above Vasishteswar flow seven streams. To the west of the river is the Surakút peak[2] where is the temple to Sureswari Devi and west of it that to Kalika. To the north-west of the Brahma peak is the Sundari-píth and the Brahmaputra stream, the Sundareswar-ling, and the Haimvati stream which joins the Sundari and then forms a *tírtha*. The Haimvati has its source in the Siva peak, and on its banks is the Bhagvati ling, to the south of which is a pond with yellow water and the Bhuteswar-ling. Next comes Indra-kund and to right of it the Sakra-tírtha and Rudra-tírtha and, on the banks of the river, the Trisul-tírtha. To the west is the Mahatkumári-píth where is the temple dedicated to Siva as Saileswar and the Bálwata stream. To the north is the Kunjurkút peak where are temples dedicated to Bála and Tittirparnaka Devi. The latter is situated at the confluence of the Muni and Parni streams. To the north is the Bedbarna stream and to the west the Dewal rises on the peak of the same name. Here is the temple dedicated to Siva as Dewaleswar and the Dugdh-dhára.

Bhágirathi and affluents.

To the east of the river[3] (*Ganga*) is the Chandrakút peak where is the temple to Bhubaneshi Devi and on the summit the Jagates-

[1] This is the only allusion to the Baktrian Greeks that has been found.
[2] Sarkot at the head of the Ráma-Sera valley.
[3] The name Ganga or 'the river' is applied either to the Bhágirathi or to the Alaknanda according to the locality.

war-ling. To the south is the Nágeswar temple and near it the Bhagwati stream: to the north-west is Bágeswar and west of it the Nákshatra Panch-dhára and Chámra-dolini streams and the temple to Chámreswar. Gardabha Asura was slain by the Rishis on the mountains above Chámreswar now marked by the temple of Gardabhotkharnádini Devi. To the west on the banks of the river is the hermitage of Brahma and the Koteswar-ling. In the same tract are several *lings* and pools and places of pilgrimage. Bhadrsen's hermitage is also here and to the north-east near Bhillang-sarovara the Sateswar-ling, and at the confluence of the Bhillang and Bhágirathi the temple to Gáneswar and the Dhanush and Shesh-tírtha. To the north of the river is the Málvatya hermitage, near which is the Ashmurtteswar-ling. To the west near the Kútádri range is the Raudrisila, and to the south of it Yaksharaja's tapasthal and to the west on the Shekhar peak the Parnaban. Next comes the Gobardhan peak with its *ling* and temple, and to the south on the west bank of the river the Bháskara-kshetra with its *ling*, pools and temple. Then comes the Nawala stream and to the south Gaumukh. West of Bháskara-kshetra is the Ghantakarn-Bhairab, the temple to Kandumati Devi, the Bráhmi-sila and the Mokshavati stream which joins the river at Moksha-tírtha.

Deoprayág.

At the confluence of the Ganga and Alaknanda is the great Deoprayága-tirtha[1] and the Brahma-kund where Brahma made his devotions before commencing the creation of the world. To the north of the Bhágirathi is a Siva-ling and between the two rivers the Swayambhuva-ling. Near the confluence we find also the Baitálika-sila, Betál-kund, Siva-tírtha, Suraj-kund, where Medhatithi performed austerities, Vasish-tírtha, Bárâhi-tírtha, Bárâhi-sila, Paushpamálá-tírtha, where the Kinnari Pushpamálá performed austerities, and Pradyumnasthal. Near the Pradyumnasthal is the Baijpáyan-kshetra, where there is a cave containing an image of Bishnu, and about half a kos beyond near the Gridhráchal peak, the Bilwa-tirtha. Above Suraj-kund is the Rishi-kund, on the right bank of the Ganga is the Saur-kund and east of the confluence and on the right bank is the temple dedicated to Siva as Tundíswar and

[1] Deoprayág in Tihri.

about four bow-shots off the Danweswar temple near the Danwati stream. At the confluence of the Danwati are five well-known *lings*: Bisweswar, Mahá-ling, Tátakeswar, Tundíswar, and Danweswar. The Bisweswar-ling was established by Ráma. To the south of Deoprayág, where the small Nabálika stream unites with a branch of the Bhágirathi, is the Indraprayág-tírtha and Indra and Dharm-kund. To the south lies the Dhanush-tírtha, the Brahmadhára and Indreswar-ling. To the east of the Nabálaka is the Trisúl-tírtha, pool and stream, and to the south the Urmika stream and to the east again the Vainateya stream whose confluence is marked by the temple to Garureswar. To the south is the Bibhávini stream and at its confluence the temple sacred to Bháveswari Devi. To the left is the Mend stream and to the right the Rájendri stream and at their confluence the Prithi-tírtha, where Prithu performed austerities marked by the site of the Pritheswar-ling. To the south the Kapinjala stream rises on the Kaparddak peak which is honoured by a Siva-ling, and to the east the Chandrakút[1] peak has another called Deveswar, near which flows the Chandratoya stream. Next comes the Lángal peak with its Lángaleswar-ling, and to the south-west the Manjukula stream which has at its confluence the Bhím-tirtha. About a kos to the east is the Pingalika rock where is a temple dedicated to Ban Devi. Half a kos to the west is the Dhenu stream and half a kos to the south the temple dedicated to Trisúleswari Devi.

About two *kos* from the Nabálaka stream is the Diptijváleswaripíth where, in former times, lived the daughter of Puloma. Hence to the east is the place where Kandu performed austerities and the Kándavi stream and a temple to Uma Devi and the Kaibaleswarling. To the south flows the Kápilanírini stream and to the east is the hermitage of Kapila and south-east the Ráshtrakúta peak. The Rathabáhini is like the Nabálaka, and about eight *kos* to the south of it is the Banyasríkeswar-ling and a pool with yellow-coloured waters. Some twelve *kos* to the south is the temple dedicated to Devaráshtreswari Devi with its pools, streams and lings. To the west is the Punyakút peak where is the pool and temple sacred to Nandeswar, and to the south-west the Sundar peak with

[1] The Chandrabadini peak.

the stream and temple sacred to Sundareswar. Some twelve *kos* to the west by south is the Bhúrideo peak where the prince of that name performed austerities and called the peak and stream after himself. This stream joins the Nabálaka at the Bhavanáshan-tírtha, where are temples sacred to Bhaváni Devi and Bhavamochan. To the south is the Sihlo peak where a Bhil of that name performed austerities, and to the left about ten *kos* off a pond, to the west of which flows the Svettarangini stream. To the south-west is the Karíndrádri peak, whence flows the Karini stream, and at its confluence is the Bhairab-tírtha and on the summit of the peak the Mandareswar-ling. Below it on the right side flows the Bhadratara or Bhrigupatni stream, and at the confluence is the Daridranibáran-tírtha where Lakshmi resides. Eight *kos* to the south is a temple to Kálika and twelve *kos* to the east are the Bírini and Bharani streams, and at their confluence the Bhrigu-kund, whilst the Binayak-tírtha lies four *kos* to the south of Indraprayág. To the north-east of the Kubjámraka-kshetra on the western bank of the river is the temple dedicated to Siva as Yogeswar, the Siva-tírtha and Suraj-kund. To the east of the Alaknanda is the place where Benu performed austerities and about eight *kos* to the west is the Bishwa stream and on the Támráchal peak a temple sacred to Gulíyesvari Devi and one dedicated to Bhairab. To the east is the Nandbhadreswari temple close to the Mena stream and to the left of it the temple of the Devi known at various times as Gunashri or Sátwiki or Rájasímata or Támasi, and here is the Náráyani stream. To the east of the Chandrakút peak is the Kaleswar Bhairab.

Sri-kshetra.

From Kolottamáng to Kolkaleswar is known as Sri-kshetra[1] in extent four *yojanas* long and three *yojanas* broad. To the south on the Kínás peak is the Yamkasthán. To the north of the river about two *kos* is the Kolásur peak and the Menuka stream with the Menukeswar-ling. Half a *kos* beyond is Deo-tírtha, where Bhukund paid reverence to Siva, a place marked by the Bhukundeswar-ling. To the south is the Suraj-dhára and to the left the Chanddhára and again the Bahni or Agni-dhára. To the north of the

[1] The tract of which Srinagar is the principal place.

river is the Syámala stream named after the daughter of Kolásura. Close to Indraprayág is the Drishadvati stream which flows from the peak of the same name and half a kos beyond the Kandika stream. In a cave on the summit is an image of Kandika Devi. To the north of the river is the Saktijeti stream and at its confluence a temple sacred to Siva as Ganesvar. Half a *kos* onwards is Bhawánisthán, and at the confluence of the Sankhwati with the river is a temple to Siva as Nahusheswar. Above this is Devipíth and on the banks of the river Upendrája-píth, in which are two streams. On the hills above is a temple to Kandukeswar Bhairab and on the banks of the river the Lásyu-tírtha and a temple to Visvanáth, and above them the Máya Devi and Máyeswar temples. At the junction of the Gori and the river is Gauri-prayág and Bágeswari-dhára with a temple to Lakshmi and above it one to Nágeswar. About a kos from where the Indráni meets the Gori is Rishi-prayág and one *kos* further Brihwa-prayág.[1] Beyond this is the Indra-punyatam-tírtha. About half a *kos* from the confluence of the Kumbhika and Gori is Bishunáth and a *kos* above it Mukti-prayág. One *kos* above on the mountain is the hermitage of Alarka. Near Gauri-prayág is the Svarneswar-ling and the temple to Binayakeswar and on the banks of the river the Binayak-kund. On the right bank of the river is the Manjavati-dhára and a bow-shot off the hermitage of Alarka and above on the hill is the Manjughosh Bhairab. Siva-prayág is situated at the confluence of the Khandava and the river. About half a mile onwards the Kalika stream is met with and half a *kos* onwards on the Kari peak a temple sacred to Kavi Bhairab. Below this is the confluence of the Khandava and Batsaja streams and above them the Siva-kút peak, whence flows the Náráyani and Rájketi streams. To the north of the river is Dundi-prayág and above it the Punyavati stream takes its rise in the Kuvera peak. Near this is the Kani-tírtha, the Dwijihvak-kshetra, Sanpat-dhára, and on the peak above Dandi-tapasthal with its golden-coloured image of Ganesh. To the east is the temple to Siva as Nirmaleswar and the Jambhu stream and the Dandika-tírtha. To the east of Siva-prayág on the right bank of the river is the Siva-kund, a ling five cubits high and the Deo-tírtha. On the north of the river in a cave is Ratirupa Devi and

[1] There are names given to very small torrents which join the Ganges.

other deities and several places of pilgrimage, ponds and holy streams.

Close to the Kasi peak is the Bhairavi stream and the Satya-sand tapasthal with Sri-kund and to the east the Bhúsuta stream. To the north of the river above Mundadaitya is the Brahma-kund, and on the right bank about four-bow-shots off is Aswi-tírtha, where is the Bhringi-sila and at the confluence of the Sarasuti the Dhanush-tírtha. Next comes the Bhairavi-píth and to the north of the river Kuver-kund, where is the temple dedicated to Ráj-rajeswári Devi and the Shrávaneswar-ling. Then comes the enumeration of the temples about Srinagar itself, nearly all of which are mentioned with characteristic anecdotes either of the form of the deity worshipped therein or of the persons who established them. On the right bank of the river above Bhairavi-tírtha is the Maheswar-ling, and to the east the red boulders known as Bráhmi-sila and Vaishnavi-sila. Rámachandra offered lotus-flowers to Siva here: hence his form as Kamaleswar,[1] and there is also a temple to him as Nágeswar a short distance beyond. The Katakvati flows from the Golaksha peak, and at its confluence with the Alaknanda is the temple to Katakeswar. To the north of the river is the Nripeswar temple and the Indra-kund and two arrow-flights to the south, the Siva-dhára and Siva-tapasthal.

Above Kamaleswar is the Bahini peak and Bahini stream and numerous springs of very pure water: also the cave and hermitage of Ashtabaktra Muni. Numerous hermitages, temples, caves, pools and streams on Indrakila and the surrounding peaks within Srikshetra are now mentioned, few of which are held in estimation at the present time. Amongst the streams noticed are the Manohari, Deovati, Madhumati, Manonmini near the Kilkileswar temple, and Jiwanti near a great cave and the Sudyumna tapasthal. The temple to Kans-mardini Devi is on the south bank of the river[2] where Chapala Apsara performed austerities. Then there is the Mandhar forest and Siva-tírtha where Bharaddhvaj worshipped Siva, the Golakshaja-tírtha, Binayak-tírtha and the Koteswar-ling. Next the Gogal river and *tírtha* and the image of Ganesh with ears like a sieve and known as Súrppakarn. On the Mohendra peak is a

[1] This temple is in Srinagar itself. [2] In Kotiya village.

great cave communicating with the bank of the river Alaknanda and within it lives Ganapa Bhairab. The Pábani flows from this peak and beyond it is the temple of Mahendreswar. Half a kos from Kateswar on the right bank of the river is the hermitage of Sukra, the Bhárgar-kund and Punya-kund and Sukradhára and Sukreswar temple. In a cave to the north is the Smashâneswar Bhairab and near it the hermitage of Parasuram. Three miles from the river and to the west of the Chaitravati stream is the Gauripíth, and above it the Dípeswar temple where Dippál worshipped Siva and near it a temple to Kalika Devi.

Half a *kos* to the left is a beautiful spring known as Siddhadrava, and near it is the Mauktikhákhya-ling. To the north of the river and south of the Chaitravati stream is the Harshavati stream and at its confluence with the Ganges the Turungareswar temple. Then the Rudra-tírtha and the Gosthavashrama-kshetra with stream, pond, temples and *ling*. Above the Harshavati some two *kos* is a temple to Táreswari Devi. The Sri-dhára lies to the north of the river. The Pattavati is about two kos from the Harshavati and next comes the Lohavati, and where the Pattavati joins the stream coming from the Tailasyáma peak there is a *tírtha*, and at its confluence with the Alaknanda the Jagadeswar-ling. To the east flows the Sunanda from the Koldeh peak and then the Yashovati stream.

Parnashanáshrama-kshetra.

The Parnashanáshrama-kshetra extends from the Akol hill to Nággiri. The confluence of the Mandákini with the Alaknanda is known as Surajprayág[1] and above it is the hermitage of Visvámitra. In the neighbourhood is the Vasisht-kund, Sura-sila, Atri-kund, Gautam-tapasthal, Bháraddhvaj-tapasthal and the Tripureswar-ling. Next comes the Chhinna. Mastakeswari-píth, and to the left the Bhíma-dhára, Bhímeswar temple, Párvatí-kshetra and Párvatí-kund. To the north-east is the Kamandulabhaya stream and the temple of Punyamati Devi and Jalaesvar. To the east some two *kos* is the temple of Kúrmásana Devi, and further east the Muni stream, on which is the Sileswar temple and some distance on the

[1] Rudrprayág.

temple to Agastyeswar.[1] Some three *kos* to the west in the Muneswar-ling and the Siddheswar-ling in Máyábidhasthán on the Máyábini stream, and at its confluence with the Bhadrabela is the Sheshesswar temple.[2] Some eight *kos* to the west of the Lásyutarangani[3] is the Bhatágár, and to the south-east from the banks of the Mandákini, the Gangeswar temple[4] and Sivasri-dhára. Further on Bahulingeswar is found on the bank of the Alaknanda and east of it on the same river Parnashanáshrama. To the east of the latter tract is Devi-kund and a Nágasthán containing a pool, ling and temple.[5] The Támra stream flows from the Pushkar peak,[6] and to the east at a distance of two *yojanas* on the banks of the Sarasvati is the hermitage of Sagara, where a *trisúl* is imbedded in the ground. The place where Siva went to Kailás is called Gosthal,[7] and there is the temple sacred to him as Siddheswar, and to the east is the Digambareswar-ling.

Mandákini valley.

Six *yojanas* to the south of Kedár is the tract known as Guptbáránasi[8] some two *yojanas* broad, and here flow the Ganges and Jumna concealed from sight and here is the temple to Siddheswar. To the west is the place where Nala performed austerities marked by the site of Nal-kund,[9] and again the temple to Ráj-rájeswari[10] Devi. On the banks of the Mandákini, Mandháta,[11] the august son of Yuvanaswa, performed austerities, and to the west of this is the temple to Siva as Báneswar. On the Phetkárini peak is a temple to Durga and her lord Durgeswar.[12] To the north-east some two kos are temples to Mahádevi and Dwetapati Mahádeo and the Dánwati-dhára. Maheshamardani[13] has a temple here where she slew the great Asura, and near it is the Patumati stream. To the south is the Kumbhika-dhára and above it is Bishnaneswar. Vyása still lives in a great cave on the Khandákhya peak, to the south of which flows the Sávitrí stream through the Bedmátristhal. To the north-west of Kedár and west of the Alaknanda is

[1] Agastyamuni or Agastmuni on the Mandákini. [2] In Tihri. [3] Lastur river in Tihri. [4] In village Phalási in Talla Nágpur. [5] Tract around Nágnáth in Bichhla Nágpur. [6] Apparently above Pokhri village in Bichhla Nágpur, where Pushkar Nág is worshipped. [7] Here we get back to Gopeswar. [8] Gupt-Káshi in Mári village. [9] Nalapatan. [10] In Ránsi Tarsáli village. [11] Temple in Ukhimath. [12] In Byunkhi village. [13] In Triyugi-Jákh village.

the Renuka peak, which also has a temple dedicated to Mahesha-mardini. To the south is the Bishwa stream which is joined by the Kapila stream, and at their confluence is the Kápileswar temple. Beyond this is the Jamadagneswar and Bhilleswar temples and the place where Bályati, son of Vyása, fixed his hermitage. Beyond this is the Nág river and the great black boulder above which is the Ghosheswar temple.[1] To the left some half a *kos* off is Dharm-sila and the temple to Dharmeswari Devi, then to the east on the river-bank the Sháli-tírtha, also called Deo-tírtha. About a *kos* to the north-east is Dhenu-tírtha and near it Káshtádri or Káshtagiri, amid whose forests Siva is worshipped as Káshtes-war.

West of the Alaknanda.

Some half a yojana to the west of the river is a great peak called Bhalládri, where there is a *bar* tree (*Ficus Indica*) whose shade extends over four *kos* and the Bálakhilya stream. The place where the latter joins the Jahnavi is known as Muni-tírtha and has a temple dedicated to Siva as Bálakhilyeswar. Some half a kos hence is the Kapila river, and above it on the hill the Kapil Bhairab. Some twenty-four kos to the north of 'the river' is the hermitage of the Rishi Lomasa, near which is the source of the Lomas river. To the north are the white mountains and at the source of the Ganga the Bhágirathi tapasthal and to the north of it the source of the Yamuna. To the north of the Yamuna is the Ratnakoti-giri, where is the hermitage of Pulastya and the Brahmajvála stream. In the latter is the Agni-hrad, and to the north-east, on the summit of the mountain, the pool known as Muni-jvála and numerous mines. Siva is worshipped here as Nilkantheswar, and to the east is the Siddhakút peak, to the south of this is Uma-kund and Gauri-kund with their warm springs. The river flowing to the west is called Siddh-tarangi and on its banks is the Siddh-tírtha. To the north is the Trikútádri, from which flows the Sudhatarangi, and at its confluence the place is called Sudha-tírtha. The Brahma and Rudrabhadra stream also take their rise in this tract, and at

[1] Probably the junction of the Mána-rudta with the Jádh above Nilang, known as Nág encamping-ground.

their confluence is the Brahma-tírtha, where Dikpál performed austerities. To the north flow the Chitravati river and the Bhasmadhára and their confluence is known as the Bhasma-tírtha. The Kámdhára joins the Brahmaputra stream at Dhurva-tírtha, and above it the Sundari flows from the Sundar peak and the Mokshavati and their confluence is called Sundar-prayág. The remainder is taken up chiefly with detailed descriptions of places in Tihri.

CHAPTER IV.

HISTORY—(*contd.*)

CONTENTS.

Asoka's edicts in Dehra Dún: Pliny, Ptolemy. Paurânik ethnography. Identification of the names of countries and races. Mahábhárata: Summary: Kirátas. Rájya-Kirátas: Customs of the Rájis: Bhotiyas: Doms: Thárus: Bhuksas: Sakas: Nágas. Nágas in Nepál and Kumaon: Khasas: Khasiyas are Hindús: Kators of Kábul: Sakas of Kábul: Greco-Baktrian kings of Kábul. Brief sketch of Baktrian history. Euthydemus. Dates on Baktrian coins. Successors of Eukratides. Decline of the Greek power. Yavanas in the Hindu records. Baktria. Chinese annals. Geography according to the Chinese records. Kadphises and Kanerki. Vikrama and Saka eras. Legends. The nine gems. Abu Rihán Al Birúni. Observations on Al Birúni's account. Chronicles of Kashmír. Early use of the Saka era. The origin of the Vikrama era. Further history of the Yueh-ti. Hwen Thsang. Musalmán historians. Modern inhabitants of the tract between the Hindu-kush and the Indus. Conclusions.

Before considering the ethnography of the Puránas it will be well to notice here the other early records and traditions that we possess regarding this portion of the Himálaya. Although we can hardly reckon amongst them the edicts of Asoka, yet a copy of these edicts and perhaps the most interesting amongst the many that exist was found at Kálsi or Khálsi in the western part of Dehra Dún. Asoka lived in the latter half of the third century before Christ and the existence of his edicts in the Dehra Dún would perhaps show the limit of his power in this direction and that the Dún, even at that early period, must have been of some importance, for it would manifestly be of little use to place an inscription of the kind in an uninhabited jungle. This record is inscribed on a great quartz boulder lying about a mile and a half above Kálsi near the villages of Byás and Haripur and just above the junction of the Tons and the Jumna. It is known locally as the *Chitrasila* or 'ornamented stone' and was discovered in 1860 by Mr. Forrest, C.E. General Cunningham[1] considers the Kálsi text to be in a more perfect state than that of any other of

Asoka's edicts in Dehra Dún.

[1] Arch. Rep., I., 247. A complete transcript of the whole inscription has been made and published by the same scholar in his Corpus Inscriptionum Indicarum; Calcutta, 1878. Táránátha (Ind. Ant. IV., 361) states that Asoka received the town of Pátaliputra in appanage 'as a reward for his victory over the people of Nepál who dwelt in the kingdom of Kasya.'

the similar edicts found elsewhere, especially in the portion of the thirteenth edict which contains the names of the five Greek kings Antiochus, Ptolemy, Antigonus, Magas and Alexander. There are, apparently, no ruins in the neighbourhood which should lead one to suppose that the record marks the site of an ancient city. The Chinese Buddhist traveller Hwen Thsang, who visited Srughna[1] in the middle of the seventh century, a place identified with the ruins of Sugh on the right bank of the Jumna not far below Kálsi, is silent as to the existence of inscriptions or even of the Dún itself. We may, therefore, well accept the local statement that for some centuries after the Christian era the Dún was deserted. Mr. Williams records[2] the tradition that Rája Rásálu once lived at Haripur near Kálsí, where his stronghold lies buried beneath a great mound (*tibrí*). This Rásálu was, according to tradition, the son of the great Sáliváhana, from whom the Saka era takes its name and who possessed a residence also at Khairamúrtti, near Ráwal Pindi.[3] Another tradition makes the stone the boundary mark between the dominions of the Nága ruler of the hills and the Rájas of the plains.

There are a few notices in the early Greek and Roman Geographers that can be assigned to the Himálaya of these provinces, and these have been collected from the accounts given by the companions of Alexander, by Megasthenes and Daimachus and the merchants, who from a very early period held commercial intercourse with the east. The only special treatise on India that has come down to us is the Indica of Arrian, a work of very little value for our present purpose, and the fragments of those that are missing do not lead us to expect that we should gain much by their recovery. Pliny the elder and Ptolemy of Alexandria give us the best accounts of India. Pliny completed

Pliny.

[1] Gaz. II, 245. [2] Memoir of Dehra Doon, p. 76. [3] The local legends of the country about the Tons and the Jumna are full of allusions to Rásálu. The outline story is common to all that he was son of Sáliváhana, the founder of Sálbáhanpur or Syálkot, and was at feud with the seven Rákshasas who lived in Gandgarh and Mánikpur. It was their custom to eat a human being every day and Rásálu delivered the people from this hateful tax. Colonel Abbott has given a very interesting summary of the Panjáb traditions; J. A. S. Ben. XXIII., 59, 123, and General Cunningham also refers to them, Arch. Rep. II., 21, 153. Mr. H. Rivett-Carnac has called attention to certain archaic sculpturings on a rock near Dwára Hát in Kumaon similar to the 'cup-marks,' found on monoliths and rocks in various parts of Europe. Other markings of a similar nature occur on boulders near Devi Dhúra and elsewhere in eastern Kumaon. J. A. S. Ben. XLVI., i., p. 1.

his great work in 79 A. D., and had before him the records of Alexander's expedition and Megasthenes' journey in compiling his account of India from the Indus to Palibothra (Patna), the capital of the Prasii. At the close of the chapter on China, Pliny states:— "After the Attacori we find the nations of the Phruri and Tochari and in the interior the Casiri of Indian race who look towards the Skythians and feed on human flesh.[1] Here nomad tribes of Indians also wander. There are some who state that these nations touch on the Cicones and Brysari." Now 'Conæ' and 'Chiconæ' are also read for 'Cicones,' and 'Conæ' and can only refer to the Kunets of Kunáor, which is known to the Tibetans as Kunu. The Attacori are the Uttara Kurus of the Hindu books, probably as already suggested inhabitants of the hilly country beyond Kashmír. Near them were the Phruri, a sub-division of the Sakas at one time, in Yarkand and to be identified with the Phaunas of Indian writers, and the Tochari or Turushkas, a branch of the Yueh-ti who gave kings to Kashmír. The Casiri are one with the Khasíras, a tribe of the Khasas, who are mentioned in the Mahábhárata thus :—"Abhíras, Daradas, Kasmíras with Pattis, Khasíras, Antacháras (or borderers)," clearly showing their position in the hills to the west of the Jumna. The nomad tribes may be identified with the Pattis of *s*Piti and the Brysari with the people of Basáhr. The statement that the Casiri feed on human flesh is merely an allusion to the name Yaksha[2] by which the Khasas were commonly known in ancient times. We know that they were numerous in the neighbourhood of Kashmír which is named from them and not from the mythical Kasyapa and under the name Yakshas were employed by Asoka not only to build his great *chaityas* but also as mercenaries. They were found also in Kipin, to which the Kábul valley belonged[3] and in Gandhára.

In his chapter on India, Pliny gives a general view of the position and size of India and of the sources of his information. He brings us first from the Indus to the Ganges and thence to Patna. He then adds:—

"The nations whom it may not be altogether inopportune to mention after passing the Emodian mountains, a cross range of which is called "Imaus," a word

[1] Jam Indorum Casiri, introrsus ad Scythas versi, humanis corporibus vescuntur. [2] Wilson, VI., 83; the people of Kashmír are known to the present day amongst their neighbours as Kashírús, not Kasmíras. [3] Ind. Ant. IV., 101, 141.

which in the language of the natives signifies 'snowy,' are the Isari, the Cosyri, the Izi, and upon the chain of mountains, the Chisiotosagi with numerous peoples which have the surname Brachmanæ, among whom are the Maccocalingæ. There are also the rivers Prinas and Cainas,[1] which last flows into the Ganges, both of them being navigable streams. The nation of the Calingæ comes nearest to the sea and above them are the Mandei and the Malli. In the territory of the last-named people is a mountain called Mallus; the boundary of this region is the Ganges." * * * "The last nation situate on the Ganges is that of the Gangaridæ Calingæ" * * "In the Ganges there is an island[2] of very considerable size, inhabited by a single nation: it is called Modogalinga." * * The country of the Dardæ is the most productive of gold, that of the Setæ of silver. "* * * *" The mountain races between the Indus and the Jomanes are the Cesi, the Cetriboni who dwell in the forests (*sylvestres*), and after them the Megallæ, whose king possesses 500 elephants and an army of horse and foot, the numbers of which are unknown; then the Chrysei, the Parasangæ and the Asmagi, whose territory is infested by wild tigers: these people keep in arms, 30,000 foot, 300 elephants and 800 horse. They are bounded by the river Indus and encircled by a range of mountains and deserts for a distance of 625 miles. Below these deserts are the Dasi and Suri."

The arrangement here is somewhat confusing. Pliny mentions the Kalingæ, apparently the people of the coast of Coromandel, then the Marundai or Mandai, the people about Benares, and then the Malli or Multánis. Imaus is derived from the Sanskrit 'Himavat' as Emodus is from 'Himádri,' both meaning snowy. His Isari and Cosyri here can only be the Brysari and Casiri of the preceding quotation. Next to the east in the hills comes the Izi, who may be identified with a tribe in the Mahábhárata called Ijikas who are named between the Súrasenas or people of Mathura, and the Kanyakágunas, Tilabháras, Sumíras and Mádhumattas, which last are one with the Kashmíras.[3] These Ijikas lived close to the Chisiotosagi, also called Chirotosagi or Kirátakas along the lower course of the Ganges in Garhwál: the upper portion of the same river being occupied by Brahman colonies and Macca or Maga Kalingas, a name probably connected with the Mriga tribe of Brahmans who are recorded as the Brahmans of Sáka-dwípa in the Puránas. We have moreover in the *Varáha-sanhita* the name "Mágadhika-kalinga" occurring between Panchála and Avartta. Now Panchála is clearly the middle Duáb and Avartta is the same as the Heorta of Ptolemy, a town of the Tanganoi, so that Mágadhika-kalinga must refer to the country on the upper course of the Jumna or of the Ganges, more correctly called Kylindrine by Ptolemy.

[1] The Tons below Allahabad near Panása and the Ken. [2] Maudagiri or Munger. [3] They include the Kunets, who to this day are divided into Khasiyas and Raos.

The country of the Dardæ lay along the upper Indus—'*sub-fontibus vero Indi Daradræ et horum montana superemittant*'—a tract celebrated then as in the time of Hwen Thsang for its gold-washings, and the Setæ are the people of Wazíri-rúpi or 'the silver country of the Wazírs' in British Kulu. Ptolemy places a city called Sæta in his trans-Himálayan tract near Achasia regio or the country of the Khasas. The Cesi named first amongst the mountaineers are clearly the Khasas; with them are the Cetriboni,[1] a name of which the first part may be compared with the Chatriaioi of Ptolemy, and who occupied the tract south of Shaikhávati and therefore with the Kshatriyas, a tribe (not a caste) mentioned in the Puránas. The remaining names must be assigned from the context to the lower Indus valley or its neighbourhood. The outcome of this inquiry is that according to Pliny the Khasas occupied the country far to the west of their present location in Kumaon and Nepál, and that the Kirátakas with the Tanganas held the country between the Tons and the Sárda.

Ptolemy.

It is, however, to Ptolemy that the student of ancient geography owes his greatest debt. He was born about 87 A.D. and died in 165 A.D., having completed his great work about 151 A.D. He defines cis-Gangetic India as the country to the west of the Ganges as far as its confluence with the Sarju to the south of the Gházipur district. Although he must have known many more names, he gives us only three rivers as affluents of the Ganges—*viz.*, the Jumna, Sarju and Son, under the names Diamuna, Sarabos and Soa. At the sources of the Indus he places the Daradræ; at the sources of the Jhelam, Ravi and Chínáb were the Kasperaioi, and at the sources of the Bíás, Satlaj, Jumna and Ganges, the Kulindas, whose country was called Kylindrine. The first are the people of Astor, Gilgit and the neighbouring countries; the second, the people of Kashmír and of the hill states between it and the Satlaj, and the third will be the people of the hills between the Satlaj and the Ganges. The Kulindas are mentioned in the Mahábhárata as inhabiting the upper valley of the Ganges within the Himálaya and they appear to have been independent of Kashmír. Between the Bíás and the Chínáb was the small state of the Pandavas, and on the lower course of the Indus as far as the embouchure of the Narmada below Gujrát lay Indo-

[1] The two last syllables clearly refer to the Sanskrit '*vana*,' 'forest.'

Skythia. The Chatriaioi held the tract south of Shaikhávati and the Gymnosophoi occupied in large numbers the country near the sources of the sacred rivers. To the south in the upper Duáb were the Datichæ, who possessed three towns to the west of the Ganges—Konta, Margara and Batankaissara (Batesar); and two to the east—Passala (Bisauli? and Orza. It is strange that Kanauj is not clearly indicated in any of these lists. Ptolemy mentions only two nations on the left bank of the Ganges—the Tanganoi and Marundai. The Tanganoi were the most northern of all the peoples along the Ganges and they occupied also the upper portion of the Sarabus or Sárda. They are mentioned in the Mahábhárata[1] thus:—"Kántikas, Tanganas, Paratanganas, northern and other fierce barbarians, Yavanas, Chínas," and are placed by the Váyu Purána and Rámáyana amongst the mountain tribes in the north. South of the Tanganoi were the Marundai, who occupied a broad belt along the Ganges from Borita[2] to its confluence with the Tísta. They appear to have been a small and warlike tribe who were able to take and hold possession of the country near the great river, but were not numerous enough to occupy the inner lands lying near the mountains nor to resist the power of Kashmír. Kassida or Káshi belonged to this nation, who are regarded by Wilford as a branch of the Indo-Skythians and in fact the same as the Húnas. Thirteen kings of this dynasty are said to have reigned in Northern India. In the Puránas they are ranked with the Mlechchhas or foreigners and are considered to be the Maryanthes of Oppian, who states that the Ganges ran through their country. To the east of the Tanganoi came the Takoraioi,[3] Korankaloi and Parsadai, and to the south of the Marundai were the Gangarides in the delta of the Ganges.

The information given by Ptolemy shows us that in the second century of our era, Eastern India comprised the kingdom of Kashmír, which was bounded on the north by the snowy range; on the south by the kingdom of the Pandavas, and on the east the boundary line extended from Dehli to Mathura and then as far as Bhupál. In the hills the Tanganoi, a sub-division of the Kirátas, held the entire country from the Jumna to the Sárda. In the

[1] Wilson, VII., 181. [2] Lassen suggests that Borita may be identified with Rái Bareli [3] Represented by the Thákurs of Nepál, here the name of a tribe, not a caste.

copper-plate grants preserved at the temple of Pandukeswar near Badrináth and noticed hereafter, we find that one of them is addressed to the officials of the district of Tanganapura and another to those of the districts of Tanganapura and Antaránga and both bestow lands in Tanganapura on certain Brahmans connected with Badari. Some of these lands were bounded on the south by the Ganges, so that the district lay in or about the upper course of that river. Mention is made in one grant of Buddháchal and Kákásthal, and the latter name will be the same as the Kákáchalsthán of the Kedára-khanda which lay near the confluence of the Bhágirathi and Alaknanda, so that we may safely place the district of Tanganapura[1] on the upper course of the Ganges and the Antaránga district in the duáb between the Bhágirathi and the Alaknanda. Later on we may trace the gradual eastward movement of these tribes of Kirátas to Nepál, where we find them at the present day, and perhaps the Tanganoi in the name Tanhan,[2] whence come the breed of hill-ponies called Tángan; the Thakuraioi amongst the Thákurs in Nepál and the Kirátas or Kiránti s further east.

Pauranik ethnography.

We shall now proceed to examine the ethnographical indications afforded by the later Hindu records. According to the Vishnu Purána,[3] the Kirátas lived to the east of Bhárata, on the west the Yavanas, whilst in the centre dwelt the four castes occupied in their respective duties. The principal nations of Bhárata[4] were the Kurus and Pánchálas, in the middle districts; the people of Kámarúpa in the east; the Pundras, Kalingas and Mágadhas in the south and in the extreme west, the Sauráshtras, Suras, Abhíras, Arbudas, Kárúshas and Málavas dwelling along the Páripátra mountains; the Sauvíras, Saindhavas, Húnas, Sálwas, people of Sákala, Madras, Rámas, Ambashthas, Párasíkas and others. From other sources, however, we can add to this very meagre list of countries and tribes. The Mahábhárata gives[5] the names of the inhabitants of the different countries in one long list commencing with the Kurus, Pánchálas and

[1] At the time of the grants in the eighth or ninth century, Tapuban was in the Kárttíkeyapura district. [2] This name continually occurs in the legends regarding the dispersion of the Rájpút tribes after the Musalmán invasion. [3] Hall's Wilson, VII., 129. [4] By this name India proper is intended, as no description is anywhere given of the other divisions. [5] Hall's Wilson, VII., 156.

Madreyas; then follow the Jángalas, Surasenas, Kalingas, Bodhas, Málas, Matsyas, ** Kárúshas, Bhojas, ** Báhíkas, Vátadhanas, Abhíras, ** Vakrátapas and Sakas, Videhas, Mágadhas, ** Bhargas, Kirátas, Sudeshtas and the people on the Yamuna, Sakas, Nishádas, Nishadhas, ** Kashmíras, Sindhusauvíras, Gándháras, ** Kuruvarnakas, Kirátas, Barbaras, Siddhas, ** Trigartas, Sálwasenis, Sakas, ** Tanganas, Paratanganas, northern and other fierce barbarians (Mlechchhas), Yavanas, Chínas, Kámbojas, ferocious and uncivilised races, Sakridgrahas, Kulatthas, Húnas and Párasíkas; also Romanas,[1] Chínas,[2] Dasamálikas, ** Sudras, Abhíras, Daradas, Kashmíras, with Pattis, Khasiras and Antacháras or borderers, ** tribes of Kirátas, Tamasas, Hansamárgas, &c. This list[3] is very unsatisfactory owing to the repetition of the same name in different quarters and with different tribes preceding and following, an arrangement that can only be explained by supposing there were colonies of the particular tribe scattered over various parts of India. If this theory be correct there were Saka colonies in Magadha, on the Jumna and in the Kangra valley. The *Varáha-sanhita* gives a more complete[4] list and places in the north:—Kailása, Himaván, Vasumán-giri, Dhanushmán, Krauncha-meru, Uttara-kuru, Kekaya with its capital Girivraja (now Jalálpur on the Jhelam,[5]) Vasáti,[6] Bhogaprastha (Hardwár), Arjunáyana, Agnídhra, Adarsa,[7] Antaradwípi (Duáb), Trigartta,[8] (Kotkangra in Jalandhar), Tahora,[9] Turagáma or Asvamukha,[10] Kesadhara, Chipitnasika, Daseraka, Vatadhána, Saradhána, Takshasila (Taxila), Pushkalavata (on the Swát river), Kainátaka, Kantadhána, Ambara, Madraka,[11] Málava,[12] Paulava,[13] Kachchha,[14] Danda,[15] Pingalaka, Mánahala, Kohala,

[1] Can these be represented by the Rum division of the Siyáhposh in Wámastán or Káfiristán as it is more commonly called. [2] Probably to be found in the Shins of Astor, Gilgit, and Yassan. [3] There are nearly 250 names, the list strung together with little attempt at description even by epithets. [4] As. Res., VIII., 243. [5] Cunn. Arch. Rep. II., 14: Asvapati, King of Kekaya, St. Martin, Etude sur la Geographie Grecque, &c., p. 110, 400. [6] Between the Jhelam and the Indus, St. Martin, *l. c.*, p. 121: Wilson, VIII, 260. [7] This and the two following are in the Panjáb. In a passage quoted by Muir (II, 400) Aryávarta is said to include the country east of Adarsa, west of Kálakavana, south of the Himavat and north of Páripátra. [8] Cunn. Arch. Rep. V. 148. [9] Tankur, Attak, *Ibid*, II. 7. [10] This and the five following names refer to the locality as abounding in banyan trees (*vata*) or reeds (*sara*) or prickly bushes (*kanta*) or are nicknames, horse-face, &c. [11] Madra-desa, the plain country between the Jhelam and the Ravi. [12] A division of the Panjáb. [13] The Puru country [14] Wilson, VII. 164. [15] This and the following six names are assignable to the minor hill-states of the Panjáb: Kohala is the country of the Kohlis, a Kulu tribe; Sátaka is Wazíri Rupi in Kulu, celebrated for its silver, and Mándavya is Mandi.

Sátaka, Mándavya, Bhútapura, Gandhára,[1] Yasovati, Hematála, Rájanya, Kachara, Gavya, Yaudheya,[2] Sameya, Syámaka, Kshemadurtta. To the north-east (north-west?) is Meruka, Nashta-rájya,[3] Pásupala, Kira, Káshmíra, Abhisára,[4] Darada,[5] Tangana,[6] Kulúta (Kulu), Sauritya, Vanaráshtra, Brahmapura (Bhágirathi valley), Dárvada, Amaravána, Rájya-kiráta, Chína, Kaulinda,[7] Palava, Lola, Jatádhara, Kunáha (Kunaor), Khasa, Ghosha, Kanchika, Ekakarna, Suvarnabhu, Vasudhana, Divishta, Pauvara, Chívara, Nivasina, Trinetra, Munjádri, Soma and Gandharva. Again it is said that the Prasthalas, Málavas, Kaikeyas, Dasárnas and Ushínaras drink of the waters of the Ravi, Jhelam and Chínáb. Between the Sindhu and Mathura on the Jumna is Bhárata and the Sauvíras, Sughna, Divya, Satadru, the country of Rámata, Sálava, Traigartta, Paurava, Ambashta, Dhánya,[8] Yaudheya,[9] Sarasvata, Arjunáyana, Matsya, Aṛddhagráma, Hastyásvapura, Mangalya, Paushtika, Sakta, Kárunya.

These dry lists of names are useful, and if we had more of them accurately recorded without any emendations from authors or editors, we might be able to draw some definite conclusions from an examination of them which would throw light on many a doubtful point. They are necessary here to show the connection between the countries and tribes mentioned in the records and thus afford some little aid to identification. When we find groups of countries or tribes always enumerated together and the same or similar epithets applied to them and sometimes the locality of one or more indicated, we may reasonably assume the position of the remainder to lie in the same direction. We shall therefore take up these names and endeavour to identify as many as we can, omitting those which are already noted as well as those which do not belong to upper India and very briefly noticing the names of places and peoples outside the Himálaya. Taking up the lists of the Vishnu Puráṇa, we have no difficulty in assigning the Kurus to the tract

Identification of the names of countries and races.

[1] Peshawar valley. [2] The Júd district on the lower course of the Jhelam. [3] Nast or Jagatsukh in the upper valley of the Biás, the ancient seat of the Pála Rajas of Kulu: we may note that Kulu is still called Kulanta by the people and hence the Khislu-to of Hwen Thsang and Kulatthas of the Puránas. [4] Known to the Greeks as the country of Abisares; Wilson's Ariana, p. 190: occurs with Dárva as Dárvábhisára and lies between Marri and the Margala pass; Cunn. Arch. Rep. II., 23. [5] Dardistán. [6] In Garhwál, p. 334. [7] The Kylindrine of Ptolemy. [8] Dhani in the eastern half of the highlands between the Jhelam and the Indus. [9] South of Dhani.

about Thanesar west of the Jumna, known to the present day as Kurukshetra.[1] The Pánchálas[2] were the people of the middle Duáb extending across the Jumna to the Chambal. Kámarúpa[3] is the north-eastern portion of Bengal and the adjoining part of Asám. The Pundras[4] lived in Bengal proper and the southern part of Behár, the Jungle Maháls and adjacent tracts. Kalinga[5] is the sea-coast westwards from the Ganges to some distance along the coast of Coromandel. Magadha is Behar. The Sauráshtras[6] held the peninsula of Gujrát. The Suras and Abhíras[7] are associated together in the Mahábhárata and Harivansa and appear to have been a pastoral people in the upper portion of the north-western Panjáb represented by the Ahírs and Gwálas of the present day. They are none other than the Sús and Abars of the classical writers, and the first name is one with the subdivision of the Sakas. Ptolemy places the Abhíras on the upper Indus as a powerful tribe. These Abhíras spoke a dialect of Prákrit, for we may refer to them the rustic speech called Abhírika, which is classed by Chandídeva with the Sákári, Sábari and Utkali or language of Orissa. The commentator on the *Kávyáchandrika*, a work on poetry, expressly cites the language of the Abhíras as an example of the rustic dialects of Prákrit. Wilson connects the Arbudas[8] with Mount Abu in Rájputána, a celebrated place of pilgrimage amongst the Jainas. The Kárúshas[9] and Málavas occupied portions of the Panjáb, for the latter are enumerated by the author of the *Varáha-sanhita* amongst the tribes who drank of the waters of the Ravi, Jhelam and Chínáb. A colony of them may, at a subsequent date, have emigrated to Malwa and given to it their name. Next come the Sauvíras[10] between the Indus and the Jhelam, usually called Sindu-Sauvíras and the Saindhus in Sindh. The double title occurs in the Mahábhárata as the name of one of the chief tribes engaged in the great war who are placed by the Rámáyana in the west and by the Puránas in the north. The Húnas are identified by some with the Húniyas of the present day in Tibet, but here there can be no

[1] Muir, II, 405. [2] Wilson, VII., 134 : Gaz., II., 63. [3] Wilson, *l. c.* [4] Muir, II., 40 : Wilson, VII., 170. [5] Wilson VII., 166 : J. A. S. Ben., 1851, 233. [6] Thomas' Prinsep, I., 334: Arch. Rep. West India, 1874-75. [7] Goldstücker, Sans Dict., 299 : Muir, II., 46. [8] Wilson, *l. c.* VII., 132. [9] So called from Karúsha, a son of Manu Vaivaswata : they occupied the back of the Vindhyan range at one time and may possibly be identified with the Chrysei of Pliny. *Ibid*, 158. They are frequently mentioned in the older records. [10] Cunn. Arch. Rep., II., 14.

doubt but that the name refers to a Panjáb tribe. The Sálwas[1] held Rájasthán and Sákala is the Sangala[2] of Alexander and the capital of Madra or the Panjáb between the Jhelam and the Indus, elsewhere known partly as Hárhaura. The Rámas[3] belong to the country of Rámata, which as we have seen lay close to the Satlaj, and the Ambashthas are the Ambastai of Ptolemy and are placed by Goldstücker[4] in the middle Panjáb, and all agree that the Párasíkas[5] are the people to the west, of and adjoining the Indus. Thus ends the list given by the authors of the Vishnu Purána and which in Wilson's opinion applies to the political and geographical divisions existing about the era of Christianity. It is also mentioned that the Yavanas lived to the west and there can be little doubt that by this name the Baktrian Greeks are intended. To the east lived the Kirátas, who may undoubtedly be identified with the race of the same which governed the Nepál valley, and of whom we shall have more to say hereafter.

Mahábhárata.

We shall now turn to the lists given in the Mahábhárata, omitting those names which have already been identified as well as those regarding which no indications that can be relied upon exist. The Surasenás[6] were the people of Mathura, the Suraseni of Arrian, and are placed in the Mahábhárata in one place before the Kalingas and again between the Tíragrahas and Ijikas or Itíkas and Kanyakágunas (Kanauj) and once more in the north. The Bodhas or Bahyas are supposed to be a tribe of Central India and the Málas[7] to have been in Chhatísgarh. There appear to have been two Matsyas, one comprising Dinájpur and Kuch-Bihár called southern Matsya, and a tribe of the same name in the north with a capital at Bairát on the Banganga some forty-six miles north of Jaipur.[8] The Bhojas[9] belonged to the Yádava race and had their settlements on the Vindhyan range. The Bahíkas[11] were a people of the Panjáb and the Vátadhanas were a northern nation, though Nakula places them in the west. Videha is Tirhút and the Bhargas are an eastern people subdued by Bhíma. 'The people on the Yamuna' would appear to bear the translation, 'the people on or about mount Yámuna,' an eastern mountain according to the Rámáyana. Nishádhas are mountaineers or foresters

[1] Wilson, *l. c.*, 135. [2] Cunn. Arch. Rep. II., 192: As. Res. XV, 107. [3] See p. 336. [4] Sans. Dict., p. 401. [5] Wilson, *l. c.*, 136. [6] Wilson, *l.c.*, 156. [7] *Ibid.*, 157. [8] Cunn. Arch. Rep., II [illegible] [9] Wilson, *l.c.*, p. 277.

in general and may here stand for the Paropanisades and the Gándháras are the people about Peshawar. The Tanganas are the Tanganoi already noticed and are here called Mlechchhas.

The Daradas are the oft-noticed people of Gilgit and Astor and the Pattis are probably the people of Piti or Spiti. The Khashíras are the Casiri of Pliny, a sub-division of the Khasas like the Kunus. Passing on to the names in the *Vardha-sanhita* we find after Tangana comes Kulu and Sauritya on the upper Tons, then the country of forests, a name applicable to the country about the Jumna to the present day. Then we have Hwen Thsang's Brahmapura in the Bhágirathi valley. Next comes Dárvada or the Dáru country near Almora, near which is Amaravana or the sacred groves of the ancient Jagesar, and then the country of the Rájya-Kirátas, of whom and the Khasas we reserve the notice. Wilford gives the name Sumaphala as that of the country at the source of the Ganges, considering it to be one with Cho-mapán, the Tibetan name for lake Mánasarovara, but this identification is not clear. In one place Sumaphala is preceded by Madhura and Rasaka and is followed by Salila-mani, Lavana, Sankha, Manktika, Abja, Mandákini and Uttara Pandya or northern Pandya, which is traditionally situate in the northern hills. The Mandákini river flows from Kedárnáth, connected with which there are so many Pándava traditions. Brahmapura is also mentioned in the Márkandeya Purána close to Vanaráshtra on the one side and Ekapada,[1] Khasa and Suvarna-bhúmi on the other. Khasa is here clearly Kumaon and Suvarna-bhúmi the Suvarna-gotra of Hwen Thsang identified hereafter with the Nári-khorsum district of Tibet lying to the north of Kumaon and Garhwál. Out of all these names, the only ones that we are justified by tradition and fact in connecting with these hills are the Khasas, Kirátas, Rájyakirátas, Sakas, Nágas and Húnas,[2] and these we reserve for a more minute and searching investigation.

Summary.

In the preceding review of the literature bearing on the early history of the Himálaya we have endeavoured to show that whilst living between

[1] The Ekas are a hill-tribe akin to the Kirátas and are now only found in Nepál. [2] The Húnas of the inscriptions are clearly a powerful tribe of the plains defeated by Damodara Gupta at the battle of Maushari. For the speculations regarding the connection between the Húniyas and the Magyars see Hyde Clarke on the Himálayan origin and connection of the Magyar and Ugrian in J. Anth. Inst., VII., 44.

the Indus and the Sarasvati, the Aryans had but little knowledge of the Kumaon Himálaya. As they approached the Ganges their information becomes more complete, and though we have no topographical details until we reach the period of the later Puránas, yet we may gather from the older writings that the sources of the great rivers were at a very early period held sacred. We also learn that the hills and forests of northern India were occupied by tribes regarded more as degraded members of the Aryan stock than as aliens in race. That they had attained to a certain degree of civilisation in some respects superior to that reached by the Aryans of the Vedas; they lived in forts and walled towns and were versed in the uses of drugs and knew how to smelt ores. In the later lists we infer from the recognized position of some the probable locality to be assigned to others, and that in the northern Himálaya were found the Dáradas, Kashmíras, Kámbojas, Gandháras, Chínas, Sakas, Yavanas, Húnas, Nágas, Khasas and Kirátas. The first four have been already identified as north-western tribes and the Chínas as representing the people of Gilgit, Astor and Yassan. We next come to the Sakas, to whom local tradition points as one of the earliest ruling races in the Kumaon hills. In one of the many curious legends[1] handed down to us by the early writers it is said that the Yavanas, Sakas and similar tribes were created from the tail of the wonder-working cow Kámadhenu, and that the Kirátas and similar tribes were formed from her sweat, excrement and urine, a subtle distinction implying grades in degradation, and further that the Sakas and Yavanas belonged to the superior class. It may also teach us that this difference was intended to distinguish between the degraded Aryan and the autochthonous tribes, or rather those of the early immigrations.

Kirátas.

There is every reason to suppose that the Nágas, Kirátas and Khasas entered India by the same route as the Aryas, and that the Kirátas were the first to arrive, then the Nágas and then the Khasas. The earliest notices regarding the Kirátas bring them as far westward as the Jumna in the first century. Local tradition in Nepál gives them an eastern extension to Bhután and at a very early date they held the Nepál valley. Twenty-nine names[2] of kings of this race are

[1] In the Rámáyana. [2] Wright's Nepál, pp 89, 106, 312.

given in the local history of Nepál. We have collected the names of fourteen rulers attributed to the Khasa race in Káli Kumaon which are so similar in character that there can be little doubt of a close connection between them. Indeed, the community in manners and religion between the different divisions of the snake-worshipping tribes would alone show a common origin and will also explain how they all insensibly blend one with the other. In the lists of peoples given in the Vishnu Purána,[1] we have already seen that the Kirátas or Kirátis are said to have occupied the country to the east of Bhárata as the Yavanas dwelt the west. In the Mahábhárata we find them to occur with the Jángalas (or 'dwellers in thickets'), Kuruvarnakas (or 'dwellers in the Kuru jungles') and Barbaras in one place, and again we have 'Kirátas, Tamasas' and 'Kirátas Sudeshtas and people near the mount called Yamuna'. All these indications[2] agree with the position already arrived at on the upper Jumna and Ganges. The Tamasas are the people of the Tons of 'dark river', so called from the effect of the forests on its banks and itself an affluent of the Yamuna or Jumna. The Kirátas are also joined with the Sakas and Savaras as Dasyus,[3] and in the Rámáyana they are described as "with sharp-pointed hair-knots, gold-coloured and pleasant to behold." It was as a Kiráta that Rudra appeared to Arjuna in the valley of the Ganges. The local annals of Nepál ascribe to the Kirátas a dynasty that ruled in the valley for ten thousand years in the Dwápara Yug, where also there was a celebrated settlement of the Nágas, and after expelling an Ahír family they continued in the valley and were rulers of Nepál when Asoka visited it in the third century before Christ. We are further told that they previously lived to the east, but that they removed to Suprabha (Thánkot) to the west of the valley before establishing themselves in Nepál.[4] The Kirátas are now a short, flat-faced people, powerfully built and are Buddhists in religion. From Dr. Campbell we learn that on the frontier between Sikkim and Nepál they are regarded as generically one with the Limbús. According to him, the sub-divisions of the tracts inhabited by the Limbús are two in number:—Kiránt-des, extending from the Dúd-kosi to the Arun river east and the Limbú-des from the Arun to the Konki. Using

[1] Wilson, VII., 130. [2] *Ibid*, 171, 176, 187. [3] Muir, II., 365, 491.
[4] Wright's Nepál, p. 89, 106, 110, 312: see also J. A. S. Ben., 1849, p. 733, 766: 1858, 446.

the tribal name 'Limbu' in its extended sense, we have the Hung and Rai divisions, the first of which carries us back to the Húnas and the Hingu of the Márkandeya-Purána. This identification is strengthened by the marked Mongolian features of the people who owing to their isolated position have had little intercourse with Aryans or Aryanised tribes and preserve the original type intact. We cannot be wrong in assigning these Kirántis[1] to the Kirátas of whom we have recorded so much, but they have no connection in appearance, language or religion with any important section of the people now inhabitants of the tract between the Tons and the Sárda.

Rájya-Kirátas.

We have, however, in the name 'Rájya-Kiráta' possibly a living link between the Kirátas of somewhat Tibetan physique and the Khasas of equally pronounced Aryan form and habits, if we can connect them with the Rájis of Askot in Kumaon. The *Varáha-sanhita* places the Rájya-Kirátas between Amaravana and Chína or between Jagesar and Tibet, and the title will either mean the princely Kirátas or the Kirátas of 'Rájya.' It has been observed that Kumaon and Karttikeyapura are called 'Rájya' in the Pandukeswar inscriptions, meaning literally the kingdom ; but this, however, is merely a coincidence and, as we shall see, no weight can be attached to it, as it belongs to a formula common to many inscriptions in the hills and plains. The important fact is their position in the list and the knowledge that Kirátas once lived to the west and east of the present settlement of the Rájis in Askot on the Káli. The Rájis have often been noticed by ethnographers whose speculations have been based on a few lines in a report of Mr. Traill.[2] It is there said that the Rájis "represent themselves as descendants of one of the aboriginal princes of Kumaon who with his family fled to the jungles to escape the destruction

[1] It has been attempted to connect them with the Katyúrs, but the argument is not worth stating here. According to Hodgson, the alpine basin of the Sapt Kausika or country of the seven Kosis was the original seat of the Kiráutis, who are identified by him with "the classical Cirrhatæ, a once dominant and powerful race, though they have long since succumbed to the political supremacy of other races—first the Makwánis and then the Gorkhálís." The Kiráutis are now numbered amongst the Limbú tribes of the central region of the Eastern Himálaya. Campbell considers the word 'Limbú' a corruption of 'Ekthúmba,' the correct denomination of the people and generally used by foreigners to designate the whole population of the country between the Dúd-kosi and the Mechi, except such as belong to the well-marked tribes of the Múrmis, Lepchas and Bhotiyas, who are Buddhists, and the Parbatiyas, who are Brahmanical in religion.
[2] First Commissioner of Kumaon, in his Statistical account of Kumaon ; Report on Kumaon, pp. 19, 57: As. Res., XVI., 150.

threatened by an usurper. Under the pretension of royal origin, the Ráwats or Rájis abstain from offering to any individual, whatever his rank, the usual eastern salutation." He also states that there is "a total dissimilitude of language" between the Rájis and Kumáonis and that the Doms may have been descended from these Rájis, "the former being, for the most part, extremely dark, almost black, with crisp curly hair inclining to wool." This is the only account that has ever been given on any authority regarding the Rájis, yet Professor Ritter found in it confirmation of the opinion that a negro race may have been among the aboriginal inhabitants of the Himálaya and Kuen-lun.[1] There is no foundation for the statement that the Doms have curly hair inclining to wool. Out of hundreds that have come under notice not a single one can be said to have any negroid characteristic, though many are of an extremely dark complexion like the other similar servile castes in the plains. Dr. Pritchard[2] conjectured that the Rájis would be found to resemble the other numerous aboriginal tribes found along the Himálayan border, all possessing "the physical character of the Bhotiyas in general and very unlike the Doms." Dr. Latham,[3] too, expresses his conviction that the Rájis are the equivalents to "the Chepang of Nepál."

The only information that can here be added regarding the Rájis has been furnished by intelligent natives of Kumaon who have fallen in with the tribe during their visits to the Askot forests and the following short extract from Captain H. Strachey's journal at Garjjia ghat:—"The Rajbári Karinda (agent) caught two of the *Banmanus*, the wild men of Chipula, for my inspection. I saw nothing very remarkable about them except an expression of alarm and stupidity in their faces and they are perhaps darker and otherwise more like lowland Hindustanis than the average Kumaon Paháris." They manufacture wooden bowls for sale and "live under temporary huts, frequently moving from place to place amidst the jungles of Chipula; their principal subsistence being certain edible sorts of wild plants and what game they can catch, and they occasionally get presents of cooked food from the villagers. They have a dialect of their own, but some of them can communicate with their civilised neighbours in Pahári Hindi." The scanty

[1] Pritchard's Researches, &c., 3rd ed., IV., 206, 231. [2] Ethnology of the British Colonies, p. 182. [3] Ethnology of India, pp. 11, 16.

vocabulary of the Ráji language that has been collected supports the connection[1] with the tribes of Nepál suggested by Dr. Latham. It is a mistake to suppose that the Rájis are confined to the few families representing them in Kumaon, for there exists information which may be considered trustworthy that Rájis are numerous along the foot of the hills below the province of Doti, the most westerly district of Nepál, and this brings them to the locality assigned by Mr. Hodgson to the Chepáng, *viz.*, the forests of Nepál west of the great valley, and therefore between the Kiráutis and the Khasiyas. From their language it would appear that they are of ordinary aboriginal stock like the Kiráutis, a still further reason for identifying them with the Rájya-Kirátas of the Puránas.

Customs of the Rájis.

The Rájis themselves say that they are of Hindu origin. That when the world began there were two Rájpút brothers, of whom the elder was a hunter and lived in the jungles, whilst the younger cultivated the ground and had a fixed abode. The younger brother received the government of the world and said to his elder brother, "there cannot be two Rájas in one country," and accordingly the elder brother retired to the forests and his descendants are now called Rájis, who neither cultivate the ground nor live in permanent dwellings. The Rájis are said to have their own peculiar gods, but they also worship those of the Hindús and, like the people of Kumaon, and indeed of the entire Himálaya, attribute great power to the local deities, sprites, goblins and deified men. They bury their dead[2] and their only funeral ceremony is said to be this, that for ten days after death they every night place out in the open air vessels of rice and water for the dead. The Bodo and Dhimáls to the east also bury their dead, but the Limbús first burn their dead and then bury the ashes. The former are allied to the Kasiyas of Asám, and amongst the latter are included the Kiráutis of Nepál. Honesty[3] and chastity they hold in great honor. They hide their women from all strangers, declaring that they are of royal race and must not be seen. They seem to be almost omnivorous and are said to approve especially of the flesh of the great *langúr* monkey. They support themselves chiefly by

[1] Traill mentioned (1823) only twenty families and Captain H. Strachey states that he was informed that there were only five or six families (1846).
[2] In this peculiarity was recognised one of the marks distinguishing the Dasyus of the Vedas. [3] For many of these facts regarding the Rájis I am indebted to a note by Sir J. Strachey.

hunting and fishing and they get what grain they require from the Khasiyas, giving in return wooden implements of husbandry and vessels which they manufacture with some skill. There seems no reason for supposing with Mr. Traill that there is a connection between the Rájis and the Doms. The former are certainly very far from holding such an opinion and profess the greatest contempt for the Doms: so that if one of that class enters the dwelling of a Rájí, the place must be purified with water brought from twenty-two different places. There are twenty or thirty families of Rájis in the eastern parts of Kumaon, chiefly in pargana Askot, and a few families live near Jageswar in Chaugarkha, the ancient Amaravana. The latter seem to be gradually becoming extinct, and they say themselves that they have never prospered since, forsaking the customs of their race, they began to cultivate the soil. The Ráwats mentioned by Mr. Traill are said to be Rájis who have settled themselves in villages and to whom are attributed the various petty dynasties of eastern Kumaon who preceded the Chands. We shall see hereafter that these Ráwats are mentioned in inscriptions as well as in tradition, and that their country is called Rájya. A class[1] called Lúl inhabiting the same tract has similar traditions, and both still occupy several villages in Káli Kumaon. As they seem to be distinct from the Khasiya population, it is not improbable that the tradition may be true which declares that they were formerly Rájis and that both represent the ancient Rájya-Kirátas of the Puránas, one class preserving many of its old customs, whilst the others has almost merged in the Khasiya population. We shall now continue our notice of the other tribes in Kumaon before proceeding to the Khasiyas, who will take up considerable time and space.

Bhotiyas.

We have already stated that when we pass to the north of the great snowy peaks, we get among a different people, the Bhotiyas. Bod, the native name for Tibet, corrupted by the people of India into Bhot, has given rise to the name Bhotiya for the border tribes between the two countries. Bhot has not altogether lost its proper meaning, for it is still applied generally to the tract north of the great peaks, without reference to physical or political boundaries, though in Kumaon it is now more

[1] Query, people of Lola; see p. 303.

commonly used to signify the country within the snowy range south of the Tibetan frontier. It is rather an ethnographical than a geographical expression, intending the country inhabited by Bhotiyas, rather than one of which any precise boundaries can be named. It will be convenient here to use the word Bhot and Bhotiya in this restricted sense. The adjacent province of Tibet is here called Hundes, and its inhabitants Húniyas. This name was supposed by Moorcroft[1] to be Un-des or wool-country, and by Wilson to be Hiundes or snow-country, but the real name is Hundes or country of the Húnas. This name is clearly connected with the Hioung-nu of the Chinese records and the Húnas of the inscriptions. There is no reason, however, to believe that the name Húna in the Puránas or the inscriptions is intended to apply to the trans-Kumaon Húniyas, but only that they belonged to the same Tibetan race, for the Húnas of those records appear to have been a powerful tribe in the plains, and the allusions to them are too numerous and too important for us to assign them to the predecessors of the comparatively unimportant Húniyas of *g*-Nári in Tibet. That the Bhotiyas themselves are of Tibetan origin is sufficiently shown by the language that they speak, by their Mongolian caste of countenance, and those unmistakeable peculiarities that belong to the Tibetan race, and which are as well marked in them as in the Húniyas themselves. The Bhotiyas are, however, little inclined to admit this origin in their intercourse with Hindús. In the traditional account of the colonisation of the Bhotiya valley in which Milam is situate, and which is given hereafter, they declare themselves the offspring of a Rájput immigration from beyond the snows that succeeded a Sokpa colony, but they are usually called Sokpas themselves. Tibetan annals undoubtedly mention the existence of a trans-Himálayan Kshatriya kingdom, but it was the rulers that were of Hindú origin, not the people. On the boundary line between the Khasiyas and the Bhotiyas we find a mixed population, but no particular account of them need be given here, nor of the Hindu immigrants from the plains who have for so long a time monópolised all important offices in the country and who, at the present day, constitute what we may call the upper grades of hill society.

[1] Travels, I., p. 4.

Much has been written regarding the Doms, the servile race of the hills and correctly enough supposed to be remnants of the original inhabitants. As we have noted they are of exceedingly dark complexion, as a rule, but not more so than the tribe of the same name in the plains and many Chamárs. They have for ages been the slaves of the Khasiyas and been thought less of than the cattle and with them changed hands from master to master. It was death for a Dom to infringe the distinctions of caste laid down by the Hindu laws, such as knowingly making use of a *hukka* or any other utensil belonging to a Rájpút or Brahman. Even the wild Ráji, as we have seen, considered the presence of a Dom a source of defilement. The Doms are divided into a number of classes, chiefly according to occupation, like the Chamárs of the plains, and which will be noticed hereafter. In the extreme west we find them on the right bank of the Indus,[1] living in villages apart from the people and filling the same servile avocations. In Yasan, Nagar and Chílás they are very numerous and are "of very dark complexion, coarse features and inferior physique." They are found again in the same position amongst the Aryans of Kashmír and amongst the Dogras of Jammu.[2] Here again they are noticed for their dark complexion, which unmistakeably marks them out from the light-complexioned Aryans. They are smaller in limb, stout, square built, and less bearded and altogether exhibit a much lower type of face which centuries of serfdom and oppression have not tended to modify. The Dhiyárs or ore-smelters of Jammu, corresponding to the Aguris of these hills and the Bátals of the Kashmír valley, who are curriers and musicians and correspond to the Harkiyas of Kumaun, should be assigned to the same class. The Bems[3] of Ladák occupy a similar position and are blacksmiths and musicians. In Kunáor and Kulu we have them again following the same trades classed with a tribe of similar occupation called Kohlis by the people of the lower hills, Chamárs about Rampur on the Satlaj and by themselves and the Kunáoris, Chamangs. The same remark is made about them here also that they are usually darker than the Kunets around them.[4] The smiths are called Domang in Kunáori and the carpenters

Doms.

[1] Rep. G. T. S., 1876, p. 27. [2] Drew's Northern Barrier, p. 28, 170. Biddulph's Tribes of the Hindu Koosh, p. 39. [3] *Ibid*, p. 254: Cunningham's Ladák, p. 291. [4] J. D. Cunningham's notes on Kunawár, p. 11.

are termed Oras and both are equally with the Kohlis considered of impure caste. In Nepál these helot craftsmen are represented by the Newárs. Sufficient has been said to show that these Doms in the hills are not a local race peculiar to Kumaon, but the remains of an aboriginal tribe conquered and enslaved by the immigrants Khasas. In the plains we have them in the Gorakhpur district and with Khasas in Kattak and indeed over all the eastern districts of these Provinces, Oudh and Tirhút, but with these localities we have no concern here.[1]

Tháru.

In the country lying along the foot of the Kumaon hills from the Kosi eastwards we have a tribe known as Thárus which may be traced further east to the Bágmati river. They are dwellers in swamps and great rice cultivators and are proof against malaria. They even dread visiting the plains, where they say that they suffer severely from fever. To the east they are neighbours of the Mechís, a tribe of similar character living in the thickest part of the Tarái forest lying below eastern Nepál, Sikkim and Bhután.

Bhuksas.[2]

The Bhuksás, a tribe somewhat similar to the Thárus, are found in the Tarái and Bhábar from the Pilibhít district on the east to Chándpur on the Ganges on the west, and a few scattered colonies also occur in the Dehra Dún. "They claim," according to Elliot, "to be Panwár Rájpúts and assert that their chief, Udiyajít, was driven from house and home in a quarrel that he had with his brother Jagatdeo, the Rája of Dháranagar and came to dwell with a few dependants at Banbasa on the Sárda. Udiyajít had not been there long before his aid was solicited by the Rája of Kumaon, whose territories

[1] See, however, Wilson, I., 60, 181: Beames' Elliot, II., 84: Notice of Gorakhpur district, Gaz. VI. [2] Stewart describes the Bhuksas of Bijnor thus:—"The members of the tribe are of short stature and very sparse in habit, in both respects somewhat exceeding the ordinary Hindu peasant of the district, from whom, however, they do not differ much in general build or in complexion. The eyes are small; the opening of the eyelids being narrow, linear and horizontal (the inner angle not inclining downwards so far as observed); the face is very broad across the cheekbones and the nose is depressed, thus increasing the apparent flatness of the face; the jaw is prognathous and the lower lip thick and the moustache and beard are very scanty." Some of these peculiarities are more marked in some individuals than in others, but one Bhuksa will always recognize another, though a Kumaoni says he only recognizes them when they speak. The features of the women are similar to those of the men. J. A. S. Ben., XXXIV., ii., 150. Beames' Elliot, I., 20. Stewart shows that the tradition communicated to Elliot is certainly unknown to one great section of the tribe.

required defence against some of the neighbouring powers. Success attended the efforts of the Panwár, and the gratitude of the Rája induced him to offer his defenders an asylum in his territories. Upon this they are represented to have left Banbasa and to have taken up their residence in their present abodes." We cannot accept this tradition, no more than that of the Khági Chauháns, who assert a descent from the true Chauháns. The Bhuksas are nothing more than an outlying Hinduised branch of the great non-Aryan family. In physique and habits they are allied to the Thárus and have nothing in common with the immigrant plains' tribes in Kumaon. There is no doubt that their settlement in the Tarái is of ancient date, for in the *Aín-i-Akbari* the name Bhuksár was given to the tract occupied by them up to a recent date. They are now in every respect in their habits and customs Hindus of the ordinary low caste type and employ Gaur Brahman purohits in their marriage and funeral ceremonies. Some are Sikhs and the wife follows the religion or *path* of her husband and the children that of their father. One of the Tarái parganahs is called Nánakmatha after the great Sikh guru, and there is a Sikh shrine there as well as in Dehra and Srinagar. The Bhuksas bear an excellent moral character; they are inoffensive and peaceable as well as intensely indolent and ignorant. They have no arts or manufactures and live on the chase and a scanty cultivation. They are particularly fond of wild pig, and this may be one of the reasons why they change the site of their villages every couple of years. In some places they collect the wild forest produce, but in no systematic way. They also engage in gold-washing, extracting gold-dust to the value of a few hundred rupees a year from the auriferous sands of the Sona Nadi. They are slowly but surely dying out and now number only a few thousands. We shall now proceed with our examination of the remaining tribes in the records which we have quoted.

Sakas.

In the lists of the Mahábhárata[1] we find the Sakas in one place between the Vakrátapas and Videhas or people of Tirhút; again between the people of Mount Jamuna and the Nishádas or foresters of the Paropanisades, who lived west of the Indus; again between the Sálwasenis, a

[1] Wilson, VII., 165, 171, 179, 186.

people of the north-west Panjáb and the Kokarakas and once more in the Váyu Purána at Tusháras between the Patti or people of Piti and the Antacháras or borderers. We may gather from these statements that there were several colonies of this tribe in existence in the Pauránik times. They are the Sacæ of classical writers and the Indo-Skythians of Ptolemy. The language which they spoke was known as Sákári and in one enumeration follows the language of Berar and precedes that of Váhlíka.[1] Again it is called a *vibhásha* or dialect of Prákrit with the synonym Chandálika and ranks with the Sábari, Abhírika, Drávira and Utkali or the language of the people of Orissa. The Váhlíka elsewhere is said to be a language fit for celestial personages in the drama, the Sákári for Sakáras, Sakas and the like, the Sábari and Abhírika for wood-cutters and leaf-gatherers, and the Paisáchi for charcoal-burners and by others for barbarous hill tribes. The grammarian Lakshmídhara enumerates the following as Pisácha countries where the two dialects of Paisáchi are spoken :—Pandya, Kekaya, Váhlíka, Sahya, Nepála, Kuntala, Sudhesha, Bhota, Gándhára, Haiva and Kanojana. Of these Pandya may refer either to the hill kingdom of the Pándavas or that in the Panjáb and the remaining names to the Himálaya and adjacent countries. A later writer gives as a generic epithet for the provincial dialects the term[2] "according to the manner of those who speak like Nágas." This designation appears to have been derived from the writers on rhetoric who assign Sanskrit to the gods, Prákrit to men, and for the wild barbarous tribes scarcely deserving the name of men, such as the Chandálas, Abhíras, &c., the tongue of Nágas or serpents.

Nágas.

Though the use of the term 'Nága' in the extract quoted in the preceding paragraph may be strictly conventional, there can be no doubt that a race called Nágas existed to whom the hooded-snake was sacred. The Nágas were found in the plains and the hills, and in addition to the account of the Nága city already quoted we may mention their assembling with their king Takshak under the auspices of Indra to oppose the building of Indraprastha. The Nágas appear to have been a race of trans-Himálayan origin who adopted the snake as

[1] Muir, II., 46, 50. [2] Lassen in *ibid.*, 52.

their national emblem and hence gave their name to the cobra. Mr. Wheeler[1] writes of them :—

"The seats of these Nágas were not confined to India, for they have left traces of their belief in almost every religous system, as well as in almost every country in the ancient world. They appear to have entered India at some remote period, and to have pushed their way towards the east and south; but whether they preceded the Aryans or whether they followed the Aryans is a point which has not yet been decided. In process of time these Nágas became identified with serpents, and the result has been a strange confusion in the ancient myths between serpents and human beings; between the deity emblem of the Nágas and the Nágas themselves.

The great historic fact in connection with the Nágas, which stands prominently forward in Hindú myths, is the fierce persecution which they suffered at the hands of the Brahmans: the destruction of serpents at the burning of the forest of Khandava, the terrible sacrifice of serpents which forms one of the opening scenes in the Mahábhárata, and the supernatural exploits of the youthful Krishna against the serpents sent to destroy him, are all expressions of Brahmanical hatred towards the Nágas. Ultimately this antagonism merged into that deadly conflict between the Brahman and the Buddhist which after a lengthened period of religious warfare terminated in the triumph of the Brahman. From these data it would appear that the Nágas were originally a race distinct from the Aryans and wholly without the pale of Brahmanism; that those who became Buddhists were either crushed or driven out of India during the age of Brahmanical revival; and that the remainder have become converts to Brahmanism and appear to be regarded as an inferior order of Kshatriyas. But there is a vitality in certain religious ideas which seems to render them immortal; and whilst the Nágas as a people have almost disappeared from the Indian continent, the worship of serpents, or a reverential fear of serpents as divine beings, is still to be found deeply rooted in the mind of the Hindu. The general question perhaps properly belongs to the history of the Hindu religion;[2] but it should be distinctly borne in mind while considering every legend which seems to point to the Nágas."

The earliest tradition regarding Nepál gives the name Nág Hrad or 'tank of the serpent' to the valley in which Kathmándu is situate and makes it the residence of Karkotak, Raja of the Nágas, whose memory is still kept alive by an annual meeting for bathing and worship at the Tau-dah tank.[3] Takshak also is said to have taken up his abode in the valley for a time, and here it was that he became reconciled to Vishnu through the good offices of the Bodhisatwa Aryávalokiteswara. This legend apparently implies a compromise

The Nágas in Nepál and Kumaon.

[1] History of India, I., 147, 411: II., 630. [2] See Fergusson's 'Tree and Serpent Worship: London, 1873. General Cunningham makes the ophiolatrous Takkas of the Panjab a branch of the Nága race. See also J. B. B. R. A. S., No. 23, p. 169, IX. 256. Ind. Ant. IV., 5. [3] Wright's Nepál, pp. 77, 85, 95. There are similar legends about Kashmír.

between the followers of Buddha, the Brahmans and the snake-worshippers which curiously enough exists to the present day.[1] In Garhwál we have traces of the Nágas in the names of pattis Nágpur and Urgam and the universal tradition of their residence in the valley of the Alaknanda. At the present day Seshnág is honored at Pandukeswar, Bhekal Nág at Ratgaon, Sangal Nág at Talor, Bánpa Nág at Margaon, Lohandeu Nág at Jelam in the Níti valley and Pushkara Nág at Nágnáth in Nágpur. In the Dún, also, the Nágsiddh or Nágáchal hill is sacred to Báman Nág and in Kumaon we have the great Nág at Bastir in Mahar; Kedár Káliuág in Pungaraun; Bíni Nág in Baraun; Karkotak Nág at Pandegaon in Chhakháta; Vásuki Nág in Dánpur; Nágdeo Padamgír in Sálam and numerous temples to Nágrája. The rock bearing the Asoka inscription at Kálsi in the Dún is popularly reported to mark the boundary laid down of old between the Nága Skythians of the hills and Hindustan. The Sakas are named in the list with the Nágas and were, as we shall see, also of Skythian origin, but belonged to a very much later immigration of that race in historical times. It may, therefore, be safely assumed that a branch of the Nága race was once the ruling power in these hills. Were these lists compiled at one time and did they represent the facts of one period, there would be much difficulty in attempting any solution of the inconsistencies which they apparently present; but when the main portion of the work can be shown to be the result of various hands at different times, we may fairly assume that the lists themselves suffered at the hands of successive editors.

Khasas.

The name 'Khasa' like the name 'Nágá' is of far too wide significance to be that of a single tribe and its use at the present day to distinguish the cis-Himálayan people of Khas-des from the Bhotiyas is more generic than particular. In the Vishnu-Purána, Khasa is the daughter of Daksha, wife of Kasyapa and mother of the Yakshas and Rákshasas.[2] It is under the former name that the Khasas were known in the first century, for we find a translation of it applied to them as an epithet by Pliny. The name Khasa does not occur as the name of a people in the Vishnu Purána, but we have instead the

[1] It is not to be understood that Buddhism existed in Nepál at the time of the scenes represented in the Mahábhárata if they took place in the fourteenth century before Christ: Gazetteer, II., 60. [2] Wilson, VII., 75.

names of the Yakshas,[1] who are attendants on the Adityas with the Rákshasas and Nágás, and are here relegated to the domain of fiction. The Yakshas were present with the Rákshasas and Nágás at the milking of the earth. Vaisravana or Kuvera,[2] the god of mineral wealth, is said to be lord of the Yakshas and to dwell on Kailás, and the Yakshas are also known as Grámanis. In the Mahábhárata the Khasas do not occur in the great list, but they are mentioned[3] in the *Karna-parvan* as living in the Panjáb, between the Arattas and Vasátis. The Arattas and the people of the country of the five rivers are pronounced contemptible, and 'there a Báhíka[4] born a Brahman becomes afterwards a Kshatriya, a Vaisya or a Sudra and eventually a barber.' This statement would imply the existence of a well-known settlement of Yakshas or Khasas at an early period in the Panjáb. It was to Yaksha (Yakkha) artists that Asoka entrusted the building of his numerous Chaityas, and they were also employed by him as mercenaries in his army.[5] In the time of Nágárjuna, Nága artists were employed. In the *Dipavansa*,[6] the names of the Theros are given who converted 'the multitude of Yakkhas in the Himavat.'

In the *Váyu-Purána* the Khasas are one of the tribes that Sagara would have destroyed were he not restrained by Vasishtha,[7] and in Manu they are, as we have seen,[8] reckoned only as degraded Aryans of the warrior caste. In the *Varáha-sanhita*, the Khasas occur after the Kunáhas or people of Kunáor, the Conæ of Pliny. In the *Márkandeya-Purána*, the name Khasa is found between Ekapada and Suvarna-bhúmi, the Eka country and the golden land which we shall see hereafter is probably the *g*-Nári-Khorsum district of Tibet immediately to the north of Garhwál. There is a curious confirmation of this location in the story[9] of the gold-digging ants first mentioned by Herodotus, who tells us that:—"Besides these, there are Indians of another tribe who border on the city of Kaspatyrus and the country of Paktyika; these people dwell northward of all the rest of the Indians and from them the men are sent forth who go to procure gold." Then he describes

[1] *Ibid*, 285. [2] *Ibid*, VI., 122. [3] As Res., XV., 108. [4] *Antea*, p. 277. [5] Ind. Ant., IV., 162. Sung Yu, the Buddhist Chinese traveller, mentions a temple sacred to Bhagwán built by Yakshas in Udyána: Beal's Fah Hian, p. 196. [6] Oldenberg's translation, p. 159. [7] Wilson, VIII., 292. [8] *Ibid*, X., 43, 44: *antea*, p. 279. [9] Schiem on the gold-digging ants, Ind. Ant., IV. 225.

how this gold was thrown up by ants from their burrows. Now in a passage of the Mahábhárata, the Khasas are expressly mentioned amongst the northern tribes who brought presents to Yudhishthira and amongst them were presents of *paipilika* gold so called because it was collected by ants (*pipilikís*). This can only refer to the trade in gold dust with the miners of Thok Jalung in Tibet and indicates that at that early time the Khasiyas were the chief carriers or distributors. There is evidence to show the wide diffusion through an immense breadth of Asia of names having the apparently common root '*khas*' or '*kho*.' We find it in the names Khophene, Khoas, Khoaspes, given to rivers of the Kábul valley by classical writers and in the Hindu-kush and Kashkára of the country to the north. Colonel Wilford[1] in his curious paper on 'Mount Caucasus' attempts to trace the Khasas from Kashgár through Kashmír and Kumaon to the Khasiya hills in Asám, and without accepting his conclusion we may assume that the facts recorded by him bear out the general result of a very wide extension of a Khasa race in pre-historic times. We may connect with them Kissia mentioned by Herodotus as an old name of Susa, and Strabo[2] also calls the people of Susa, Kissii, whilst Diodorus[3] and Quintus Curtius[4] mention the Kossæi amongst the principal troops of Darius at Arbela. We may also connect with their name the Caucasus of Pliny and the Kasian mountains of Ptolemy as well as his Kasia regio. The Caucasus includes the mountainous country to the west of Kashmír and south of the Oxus and the Kasian range runs thence eastwards to Nepál. As noted[5] by St. Martin:—"le nom des Khaça a été de temps immémorial une des appellations les plus repandues dans tout le massif Himâlaïen." In the Ceylon archives, the name Khasa occurs[6] amongst the tribes who submitted to Asoka in the third century before Christ, and from Tárânátha we have the Tibetan version of Asoka's conquests in the following story[7]:—"In the Champarna kingdom which belonged to the Kuru race there was a king called Nemita who was descended from the Solar race. He had six sons born of lawful wives and besides them he had a son by the daughter of a merchant to whom he gave in appanage

[1] As. Res., VI., 455. [2] Book V., ch. 3. [3] Bk. XVII., ch. 14. [4] IV., 46. [5] Etude, &c., *l. c.* p., 417. [6] Burnouf, Introd. à l'Hist du Buddhisme, p. 362. [7] La Comme's Vassilief, p 46.

the town of Pátaliputra, as a reward for his victory over the people of Nepál who dwelt in the kingdom of Kasya and over other mountaineers." Here Nepál is mentioned as the Indo-Himálayan country best known to the writer who at the same time distinctly connects the name with the Khasas. In the 'Chronicles of Kashmír' we find[1] Khasa tribes occupying the deserted city of Narapur at a time 'when the country was full of Dáradas, Bhotiyas and Mlechchhas' in the reign of Mihirakula, the great anti-Buddhist ruler, who reigned about 500 A.D. In the reign of Kshemagupta the Raja of the Khasas compelled the king of Kashmír to give up to him thirty-six villages. A Khasa was the favoured lover of the notorious Kashmíri queen Didda in the eleventh century and was probably of her own clan, for she was aunt of her successor, the son of Udaya, Raja of Sáhi or Lohara, a small State near Abhisára. These Sáhi Rajas claimed descent from Sálivábana, who is synonymous with the Saka Raja who founded the Saka era. St. Martin states:—"On les (Khasas) trouve cités en plus de quarante endroits de la Chronique Kachmirienne, parmi les principales tribus montagnardes qui confinent au Kashmír." The natives of Kashmír are called Kashírus by their neighbours in the surrounding hill-states and the name Kashmír has undoubtedly connection with the tribe of Kashírus and not with the mythic Brahmin-made Kasyapa. Wilford records[2] that "when Parasuráma undertook to destroy the Kshatriyas, the Khasas who then lived in the plains fled to the mountains in confusion. Many went to Jalpesa and then ascended the passes." From the above it is clear that at a very early period the Khsaas were the principal inhabitants of the regions to the west of Kashmír, of Kashmír itself and of the hill country as far as Nepál and of a considerable part of the plains. They formed an important section of the Indian population found in those tracts by successive invaders, and though now possessing a national existence in Kumaon alone can still be traced from the sources of the Kábul river to the Tista. The Khasas of the plains were driven to the hills, the Vindhyas on the south and the Himálaya on the

[1] As. Res., XV., 29, 76, 79: T. B B. R. A. S., No. 34, p. 39. In the introduction regarding the creation of Kashmír, Jalodbhava is represented as "devastating the neighbouring countries Dárvábhisára, Jahundara, Gandhára and the territories occupied by the Sakas, Khasas, Tanganas and Mádhavas."
[2] As. Res., XIV., 396: Langlois, Harivansa, I., 483: II., 384: London, 1834.

north, and it is precisely in these places that we find them at the present day. We now find Khasas in the Kashkára country at the head of the Kunar valley and in the tracts adjacent to Kashmír. The Kunets of Kulu are still divided into two classes called Khasiyas and Raos, and we have the Khasiyas again in Garhwál, Kumaon and Nepál. Away from the Himálaya, we probably have them along the Vindhyan range and in the Bikaner desert as nomadic tribes under the name Khosa, most of whom are now Muhammadans. Tód[1] makes these Khosas a branch of the Sehráes. They occur again as Musalmáns in the desert around Thar and Párkar in Sind and in Biluchistán under the same name Khosas,[2] and are particularly numerous between Bakhar and Shikárpur. The local tradition is that they entered Sind with the Kalhoras and after the fall of that dynasty they settled about the desert between Márwár and the valley of the Indus. That these Khosas belong to the same race as the Khasiyas of Kumaon is not a mere suggestion, but is corroborated by the fact that the dialect of Hindi now current in Kumaon has its closest affinity with the dialect spoken in Márwár and the adjoining parts of western Rájputána[3] and not with that spoken in the Gangetic plains and Rohilkhand. We have also sporadic colonies of Khasas and Doms in Orissa and Chutiya Nágpur.

Khasiyas are Hindus.

We need not give evidence of the kind that we have collected more importance than it deserves, but there seems no reason for doubting that the Khasas were a very powerful race like the Nágás who came at a very early period from that *officina gentium* Central Asia and have left their name in Kashgar, Kashkára, the Hindu-kush, Kashmír and recognizable colonies at the present day in the hills from Kashmír to Nepál and in various parts of the plains and that the Khasiyas of Kumaon are of the same race. The account that the Khasiyas of Kumaon give of themselves tallies in all respects with the indications from other sources. They always profess to be Rajpúts who have fallen from their once honorable position by the necessity of living in a country and in a climate where the strict observance of the ceremonial usages of their religion is

[1] Tod's Rajasthán, Reprint, II., 190, 280, 293. [2] Trans. Bom. Lit. Soc., Reprint, II., 252: J. R. G. S., IV, 100. *Ibid*, XIV. 207: Postan's Personal Observations on Sind, p. 41. Hughes' Gazetteer of Sindh, p. 827. [3] Kellogg's Hindi Grammar, p. 66.

impossible, and undoubtedly this statement is supported by all the facts, so far as we are acquainted with them, which have any bearing on the question. It has been sometimes but hastily assumed, apparently from analogous circumstances in Nepál, that the Kumaon Khasiyas are a people of mixed Tibetan and Indian race. The Khasiyas[1] of Nepál may have been less exposed to Aryan influences throughout their successive wanderings or may have been modified by admixture with Tibetan tribes. For as we proceed eastwards from the Káli we find, as has already been noticed, conditions of climate which however unlike those of Tibet must still be less antagonistic than those of the western Himálaya to the diffusion of a Mongolian race. But this admission does not affect the Khasiyas of Kumaon, who in physiognomy and form are as purely an Aryan race as any in the plains of northern India. The language of the Khasiyas, as will be shown hereafter, is a purely Hindi dialect both in its vocables and in its grammatical structure, and no signs of foreign admixture have hitherto been discovered in it. Supposed resemblances in feature between the Khasiyas and the neighbouring Tibetan tribes have helped to lead some to a conclusion different from that now given, but this resemblance has no real foundation in fact. The people of the plains no doubt differ greatly in appearance from those of the hills, but not more so than might be expected when we consider the great difference in the physical conditions of the countries that they respectively inhabit: nor more than the Aryan races of the plains owing to similar causes differ amongst themselves. The moist climate of lower Bengal, the comparatively dry climate of the North-Western Provinces and the still drier climate of the Panjáb with its great extremes of heat and cold cause those physical changes in the inhabitants that are so remarkable and clearly recognisable by the most casual observer. If to the effects of climate we add the influence of the various races who have from time to time invaded India we shall have reason to believe that much of the variation observed in the plains is due to circumstances which have been wanting in the hills. However this may be, this much at least is certain that, at the present time, the Khasiyas of Kumaon and Garhwál are in all respects Hindus. They are so in language, religion and customs

[1] Mr. Beames' derivation of the name from the Arabic '*khás*' is entirely untenable, J. R. A. S., IV., 178.

and all their feelings and prejudices are so strongly imbued with the peculiar spirit of Hinduism that although their social habits and religious belief are often repugnant to the orthodox of that faith, it is impossible for any one who knows them to consider them other than Hindu. Year by year with increasing communication with the plains, the hill Hindu is more and more assimilating his practice with that of his co-religionists in the plains, whilst to the north, the Tibetan Bhotiyas are becoming more observant of Hindu customs.

Kators.

Kashkára occurs amongst the countries to which the ancient Khasa race has given a name. It is properly the name given to the States in the upper Kunar valley known now as Chitrál, Yassan and Mastúj from their principal towns. The ruling princes of these States still belong to the Kator family, the Kushwaktiya branch in upper Chitrál including Yassan and Mastúj and the Sháh Kator branch in Chitrál proper. The people there now speak a dialect in which there are many Persian vocables, but we have not sufficient evidence before as to show what the real nature of their language may be. If, as is probable, it be one with Dárd spoken by the adjoining races in Gilgit and Astor it is an Aryan language. From the inscriptions noticed hereafter we find a dynasty known by tradition as Katyúrí in the Katyúr valley of Kumaon, certainly from the eighth to the sixteenth century and forming the stock of numerous petty principalities in these hills, and possibly we may look to the Khasiya Katuras of the trans-Indus highlands for the origin of these Kumaon Khasiya Katyúris. Mr. Thomás[1] and Sir H. Elliot[2] have suggested a connection between the Kators of the mountainous region beyond the Indus and the Kumaon Katyúris. There is certainly a striking similarity in sound between the two names, but, as we have often had occasion to remark, a coincidence of this kind is frequently merely accidental and more commonly delusive. There is a marked difference observed in the Pauránik records between the Sakas and the Yavanas and the tribes classed as Nágás, Khasas and Kirátas, still they are all reckoned as Vrishalas, beyond the pale of Aryan concern, though some are recognised as of Aryan race. We have also shown that a race once occupied Garhwál

[1] J. R. A. S., IX., 177. [2] Dowson's Elliot, II., 408.

who were connected in religion and perhaps in race with the Nágás, and we may also notice the name Nacra Somtou, in d'Anville's reproduction of the native map of China, for the tract between the Karnáli and the Ganges and Sanke Somtou for that lying to the west of the bend of the Satlaj. Tradition certainly assigns the Katyúris to the solar division of the Kshatriya race, but we know the assimilating influences of Hinduism as they work before us, frequently manufacture the four castes out of the existing material found in such wild countries as Kumaon and assign to sun-worshipping tribes the attributes of the Kshatriyas of the solar race. Even at the present day the proselytising of the non-Brahmanical tribes is going on and the wealthier amongst the converts are received into and intermarry with the so-called Rajpút tribes of the hills. There is therefore no insuperable obstacle to the reception of the suggestion of Mr. Thomas and Sir H. M. Elliot, and proceeding from such distinguished scholars it certainly merits some investigation at our hands.

Kators of Kábul.

The passage referred to in Elliot is as follows:—"The identity of the name and the period of the establishment of the Kators (*sic*) in Kumaon appears to render it possible that we have in them the descendants of those Kators[1] who fought under the banners of the first Muhammadan conquerors." Kanak or Kank was the last of the Katorman kings of Kábul according to the Musalmán historians, and the same name heads the list of local kings in Garhwál according to several authorities. Elliot cites the following passage from a copy of the *Jámi'ut-tawárikh*:—"After Básdeo from among their rulers (*i. e.* of the Indians) one was Kanak, and he was the last of the Kayormán kings," and Básdeo is also the eponymous founder of the Katyúri house of Joshimath in Garhwál. Kanak of Kábul had a Brahman minister named Kalar who slew his master and founded a new dynasty of which the names of many members survive. Abu Ribán Al Birúni makes the Kábul dynasty to be of Turkish extraction and states that before the death of the last of the line some sixty generations had sat on the throne of Kábul.

We may assume, with Elliot, that the statement does not imply that the supreme power during this period remains in the same

family, but rather that the dynasty belonged to the same stock, whether Baktrian, Saka, Yueh-ti or Parthian. If we allow fifteen years for each of the sixty reigns preceding the murder of Kank we arrive at the middle of the first century before Christ for the establishment of the dynasty, or about the time of the rise to power of the Yueh-ti branch of the great Skythian race. We have to show that besides the Skythian immigrants to whom the princely power belonged there was an indigenous Indian population in the Kábul highlands, and that this people can be reasonably connected with the people inhabiting the upper valley of the Kunar river at the present day, and that there are grounds for considering that both the subject Indians and the ruling Skythians moved eastwards, and that the former may be one with the Khasiyas and the latter one with the Katyúris of Kumaon. With regard to the Khasiyas we have nothing to add to the arguments already adduced to show that they belong to the great Khasa race.

Sakas.

The name 'Saka' is given to a race of Skythian origin, for whom more accurate information is obtainable from Greek, Roman and Chinese writers and the researches of numismatists. Still in the Indian records there are so many allusions to them that we cannot pass them over in silence. So much had they influenced Hindu writers that in the Pauránik cosmogony they are given a '*dwípa*' or island to themselves,[1] situate between Krauncha and Pushkara in the Vishnu Purána, and by other records placed in a somewhat different relation which it is unnecessary to discuss here. Bhavya became king of Saka-dwípa and its divisions were named after his sons Jalada, Kumára, Sukumára, Manívaka, Kusumoda, Mandáki and Mahádruma. The mountains and rivers 'that wash away all sin' are mentioned and the castes of the different classes, the Mriga of the Brahman,[2] the Mágadha of the Kshatriya, the Mánasa of the Vaisya and the Mandaga of the Sudra and 'by these Vishnu is devoutly worshipped as the sun.' Is it only a coincidence that the name '*Kumara*' (*Komaro*) occurs on the coins of the Indo-Skythian rulers of Kashmír, and in other early Indo-Skythian inscriptions and that the sun-god was the favourite deity of many of them? We have

[1] Wilson, VII. 199. [2] *Cf.* the great emigration of Magz Brahmans from the trans-Indus, region to India and the Macca Kalinga Brahmans of Ptolemy in the valley of the upper Ganges.

shown how the name 'Saka' occurs in the Paurânik records,[1] the Mahábhárata[2] and Manu,[3] and add the following texts not before cited. The *Brahma-Purána* and *Hari-vansa* make the descendants of Narishyanta, son of the Manu of the present period, Sakas.[4] In the *Bhavishya* chapter of the *Váyu-Purána* the Sakas are mentioned as among the royal races,[5] and in the *Vishnu-Purána* it is recorded that "after these (Andhrabhritya kings) various races will reign; as seven Abhíras, ten Gandhabhillas, sixteen Sakas, eight Yavanas, fourteen Tusháras, thirteen Mundas, eleven Maunas, who will be sovereigns of the earth 1,399 years and then eleven Pauras will be kings for 300 years. When they are destroyed the Kailakila[6] Yavanas will be kings, the chief of whom will be Vindhyasákti; his son will be Puranjaya; his son will be Rámchandra; his son will be Dharma, from whom will be Varánga and others (five) who will rule for 106 years. From them will proceed thirteen sons: then three Báhlíkas and Pushpamitra and others to the number of thirteen will rule over Mekala." This remarkable passage shows us the Abhíras and Gardhabhillas as predecessors of the Sakas. The Abhíras, as we have seen,[7] lived near the Indus associated with the Baktrian Greeks and Indo-Skythian inhabitants of the same quarter. The *Matsya-Purána* reads 'Húnas' for 'Maunas' and Wilford[8] considers the Maunas or Mundas to be the same as the Mandei of Pliny and Marundai of Ptolemy and to be also reckoned with the Húnas. In a Jaina legend[9] referred to hereafter Gardhabhilla is made sovereign of Ujain and was deposed by a Sáhi or Saka noble and the Kailakila Yavanas are identified with a Grecian dynasty that ruled in Vákátaka, to the south of Haidarabad. These statements are so comprehensive that there is no necessity for further extending them by collecting the numerous similar references in other works, and we shall now proceed to examine some of the notices regarding the Baktrian Greeks and Indo-Skythians, recorded by Greek, Roman and Chinese writers.

Greco-Baktrian kingdom of Kábul.

We have now to examine more closely the history of the region to the west of the Indus and show the links in the chain of evidence that connects it with

[1] *Antea*, p. 347. [2] *Antea*, p. 337. [3] *Antea*, p. 279. [4] Wilson, VIII., 14, 336. [5] *Ibid.*, IX., 184. [6] J. B. B. R. A. S., VIII., 248. [7] *Antea*, p. 337. [8] *Cf.* Cunn. Arch. Geogh., p. 507. [9] J. B. B. R. A. S., IX., 139.

the history of Kumaon. The Greek and Roman geographers[1] give us the materials from which we can judge of the condition of the Indus region in the time of Alexander, and the coins of Alexander's successors afford us means by which we may fill up many details[2] for which other records are wanting. On the death of Alexander in Babylon in B. C. 323, India comprised the three satrapies of the Paropamisadæ, the Panjáb and Sind. The first lay to the west of the Indus and extended to the highlands in the neighbourhood of the Kábul valley.[3] Its name recalls to our memory the Nishadha-mountains of the Pauránik geographers, and refers not only to the Hindu-kush, but also to the western prolongation in the Koh-i-Bába and Paghmán ranges.[4] The inhabitants of the valleys of the Kábul, Panjshír, Nijrao, Tagao, Alingar Kunar and Swát streams to the confluence of the Kábul river with the Indus were all known as Paropamisades or Paropanisades. Commenting on the statements of the geographers in this respect Lassen remarks that :—

"We meet between the Paropamisades and the Indus a series of independent, warlike mountaineers, under their chieftains, separated into many smaller tribes, rich in flocks and herds ; they are always called Indians, though no mention is made of either institutions characteristic of India or of Brahmans. This is doubtless correct, for they are the inhabitants of the Indian frontier, not exactly regulated by Indian customs, outcasts of the soldier caste, as the Indians might term them." Ptolemy makes the Koas or Kunar stream the principal river of the Kábul valley and does not mention the Kábul or Kophen river at all. The Koas joins the Indus and the Swát river or Suastus, from which the adjoining

[1] See Further points in the history of the Greek and Indo-Skythian Kings in Bactria, Cabul and India, by Professor Lassen; ed. Roër, Calcutta, 1840. Cunningham Arch. Rep., II., 61. References in Dowson's Elliott, II., 403. Gazetteer, N.-W. P., II., 185, *s. v.* 'Saháranpur district.' [2] Coins of Alexander's successors in the East, the Greeks and Indo-Scythians, by General Cunningham. Num. Chron., Vols. 8-10. Die Nachfolger Alexanders der Grossen in Baktrien und Indien von. A. von Sallet: Berlin, 1879. Wilson's Ariana Antiqua. Thomas' Prinsep and Miscellaneous Essays, and Ind. Ant., IX., 256, note. [3] The chief cities were (1) Ortospana or Kabura or Kabul, the people of which were called Kabolitæ by Ptolemy: (2) Alexandria ad Caucasum or Alexandria Opiane identified with Opián, 36 miles to the north of Kábul: (3) Cartana or Karsana also known as Tetragonis and identified with Begrám, 27 miles to the north of Kábul: (4) Nagara or Dionysopolis, the Begrám near Jalálabad: (5) Peukelaotis or Peukelas (Pushkala), Hashtnagar on the lower Swát river: (6) Embolima or Ohind on the Indus at its junction with the Kábul river, the Utakhhanda of the Chinese Buddhist pilgrims: and (7) Aornos, the ruined hill-fort of Ránigat above Nográm. [4] For a good map see Proc. R. G. S. I., 110; also Cunn. Anc. Geog., 17.

district was called Suastene, joins the Koas. Under the sources at the Koas lived the Lambagæ (Lampatæ), the people of modern Lamghán. As we shall see, the Káfirs, to the present day, extend from Lamghán through Káfiristán to the Kashkára mountains. A recent traveller who saw the Musalmán Kashkáras and the pagan Káfirs together in Chitrál could observe no such marked distinction between them as to justify us in believing that they belonged to different races. The Káfirs, however, speak a language based on Sanskrit, whilst their Musalmán neighbours, of necessity, have admitted a number of Persian vocables. For the latter, Persian is the language of civilisation and commerce, and in the same manner as a similar influence in India has added to the Hindi vocabulary there, Persian has materially influenced the original speech of Kashkára. According to Ptolemy, the Kunar was the most westerly river of India proper, but he does not make it the western boundary, for the Lambagæ who occupied the country for a whole degree to the west of that river are still reckoned as Indians. The district of Gandhára lay between the Swát river and the Indus and below the Lambagæ and Suastene lay Goruaia, which may be identified with the tract known as Gugiana on the lower course of the Kunar river and Bajaur, including Jandúl and Talásh at the junction of the Landái and Swát rivers. From the above summary we may fairly assume that the country now known as Kash-kára and inhabited by a distinct race was in the time of Alexander regarded as a part of India and was then inhabited by Aryan races however heterodox they may have been.

Brief sketch of Baktrian history.

It is unnecessary for our purpose to notice the Indian satrapies of the Panjáb (Pentapotamia) and Sind. The other provinces of the eastern empire were Ariana and Baktriana. The former comprised Aria and Drangiana under one satrap and Gedrosia and Arachosia under a second satrap. Baktria Sogdiana and Margiana were included in Baktriana under one satrap. On the death of Alexander, his officers distributed the older territories and the new conquests amongst the most powerful of their number. Alexander's half-brother Arrhidæus and his expected son by Roxana were declared joint sovereigns. It is worthy of remark that amongst the kings of Baktria whose coins have been discovered some twenty-eight

names occur that are also found amongst the names of the companions of Alexander and the Diadochi that have been handed down to us by the Greek historians, so that we may regard the Baktrian kings as descendants of the chiefs who accompanied Alexander in his eastern campaign. At the conference of the chiefs, Oxyartes, the father of Roxana, was appointed satrap of the Paropamisadæ. Eudemus was already military governor of the Panjáb and the civil rule was left in the hands of the native chiefs. Pithon, the son of Agenor, became satrap of the delta of the Indus: Stasanor and Siburtius held Ariana and Baktriana was committed to Philip. An empire not yet consolidated and now broken up into so many petty satrapies soon fell into disorder. In B. C. 317 we find Eudemus, Oxyartes and Stasander, who had succeeded Stasanor in Aria, assisting Eumenes in his war with the Syrian king Antigonus, whilst Siburtius and Pithon espoused the opposite side. Antigonus was successful and from B. C. 316 to the defeat[1] of his son Demetrius by Seleukus Nikator in B. C. 312 his sway was acknowledged through Ariana and Baktriana. In India, Chandragupta of Patna had taken advantage of the departure of Eudemus to make himself master of the Panjáb and perhaps also of the Kábul valley. After Seleukus had firmly established himself at Babylon, he took the first opportunity that presented itself to reconquer Ariana and Baktriana and was preparing to wrest the Indian province from Chandragupta when disturbances elsewhere led him to believe that it would be more prudent to secure the Indian prince as an ally. Accordingly Seleukus surrendered the province of India to the Palibothran prince and appointed Megasthenes to reside at Patna as his ambassador. These friendly relations continued under the sons of both kings Amritajata (Amitrochates) and Antiochus Soter, who also sent Daimachus as his representative to the court of Patna. Antiochus Soter succeeded his father in B. C. 280 and died in B. C. 261. Antiochus II. surnamed Theos succeeded and died by poison in B. C. 246, when his son Seleukus Kallinikos became titular ruler of the east. Two years previously the Parthians had revolted and established a kingdom and an era of their own, and at the same time Diodotus proclaimed his independence in Baktria. Diodotus I. was succeeded by his son

[1] Whence the era of the Seleukidæ.

Diodotus II., who reduced Agathokles, satrap of Arachosia, and Antimachus, satrap of the Paropamisadæ, to subjection and they acknowledged fealty to him by placing his name on their coins. These changes must all have taken place subsequent to the death of Asoka, whose edicts contain the names of Antiochus, Ptolemy, Antigonus, Magas (of Cyrene), and Alexander (of Epirus), but make no allusion to the rebel leaders. The faction of Diodotus did not long enjoy their accession to power, for in a short time a Magnesian leader by name Euthydemus succeeded in expelling Diodotus from Baktria. We know nothing more of Baktria until we come to the eastern campaign of Antiochus III. (B. C. 212-205). After reconquering Media, Parthia and Hyrkania, Antiochus made peace with the Parthian Arsakes and proceeded to the invasion of Baktria. Euthydemus, however, was able to place himself in a position which obliged his antagonist to come to terms. He then urged that Antiochus had no reason for attempting to deprive him of his kingdom since he had never rebelled against Antiochus, but had only obtained possession of Baktriana by destroying the descendants of those who had before revolted. His son Demetrius carried further messages, and the result was that Antiochus accepted the peace that was offered and cemented the friendly relations with Baktria by betrothing his daughter to the son of Euthydemus. Antiochus then left Euthydemus in possession of Baktria (B. C. 208) and proceeded in person southwards to India. There he concluded a treaty with Sophagasenus, the king of India, and in return for a number of elephants confirmed the Indian in the possession of the Paropamisadæ and the other Indian satrapies. Antiochus had hardly reached his headquarters when Euthydemus, deeming it to be a favourable opportunity, marched southwards and annexed the cis-Himálayan districts to Baktria. This conquest was consolidated by his son Demetrius, who is styled "king of the Indians" by Justin, and whose authority extended from the sources of the Oxus to the delta of the Indus and from the Caspian Sea to the Satlaj and along the coast from the Indus as far as Gujrát. This statement is corroborated by the number and find-spots of the coins of his father and of himself. The variations in the portrait of Euthydemus on his coins show that he must have had a long reign, not less than thirty years,

Euthydemus.

according to General Cunningham.[1] Up to the time of Euthydemus, the Greek princes used Greek legends only on their coins, but from the accession of his son Demetrius all the Greek princes of India and Ariana, over thirty in number, used the Indian language and a character, happily termed Arian, on the reverse of their coins. This character is, according to Mr. Thomas, akin to the Phenician and is written from right to left, like all other alphabets of Semitic origin.[2] If Mr. Thomas' suggestion[3] be correct that in certain letters on a coin of Eukratides he has discovered the Seleukidan year 173, or B. C. 138, and on one of Plato Sel. 147 or B. C. 165, and on one of Heliokles Sel. 183 or B. C. 128, we shall have much to alter in the present arrangement of the Græco-Baktrian princes known from their coins alone.

Dates on Baktrian coins.

We know that Demetrius was old enough in B. C. 208-7 to have been employed as his father's agent in the negotiations with Antiochus, and allowing him forty years, we have the year B. C. 167 for his death and the accession of Eukratides, who according to Mr. Thomas' discovery minted coins in B. C. 138. There is no doubt that Eukratides succeeded Demetrius in Baktria, but may have left his rival in possession for a time of the Indian provinces. Justin tells us that:—"*eodem ferme tempore sicuti in Parthis Mithridates ita in Bactris Eucratides magni uterque viri regnum ineunt;*" referring to the rise at the same time of Arsaces VI., better known as Mithridates I., king of Parthia and Eukratides. Mithridates reigned[4] from 173 to 136 B.C. and is represented as the avenger of the murder of Eukratides. Even granting that the coin of Eukratides bearing the supposed date B. C. 138 was the last issued in his reign, for which numismatic evidence based on a comparison of the portraiture and devices is wanting, the remaining events of Mithridates' reign, including the expedition to India and his war with the Syrian king Demetrius, can hardly be brought into two years. According to Clinton,[5] Demetrius made his preparations in B.C. 140 and entered Parthia in July, 139, and was captured at the beginning of 138, or according to General Cunningham[6] in B.C. 139. In either case the

[1] Num-Chron., n. s., IX., 129. [2] *Ibid.*, III., 229. [3] J. R. A. S., IX., 1; see also Dr. Hœrnle's paper in Ind. Ant., VIII., 196. [4] Lassen, Bactrian coins, &c, p. 155, and 'A view of the history and coinage of the Parthians by J. Lindsay, p. 7: Cork, 1852. [5] Fast. Hell., III., 331. [6] Num. Chron., X., 233.

death of Eukratides took place at least two years previously, for we must allow that time to have elapsed in preparation for the Indian expedition, the stay in India and return of Mithridates to Parthia. We must place, therefore, the death of Eukratides in B.C. 141-40, and consequently either the date on the coin is wrongly read or the mints went on coining after the death of Eukratides in his name, or the dates given as those of Demetrius' war with Mithridates are incorrect or the initial year of the Seleukidan era is wrongly placed. These are points that cannot be discussed here. During his expedition to India Mithridates is said to have subdued the country between the Indus and the Hypanis and was stopped in his onward march by news of the preparations made by the Syrian king. He returned to Parthia, annexing the old Baktrian satrapies west of Arachosia on his way, and probably left the Baktrian satrapies in the Indian region to those in whose hands he found them. Both Mithridates and Eukratides in the earlier years of their reigns were much harassed by the incursions of the Skythians and Sogdians, and it was only when he had rest from them that Eukratides was able to turn his attention to India. Whilst returning from an expedition in which he penetrated India as far as the Satlaj he was murdered by his son, 'who had been associated with him in the sovereignty.'

Successors of Eukratides.

The name of the parricide is nowhere given, but General Cunningham considers that he must be one with Apollodotus, who is named in several passages of importance in connection with Menander in terms that would imply that they had much to do with the extension of Greek influence in India. Indeed the coins which from numismatic evidence alone are assigned to a date following close on or contemporary with the coins of Eukratides indicate a marked departure from those that preceded them. The coins of the predecessors of Eukratides and even of Eukratides himself were minted by Baktrian kings, though in many cases giving bi-lingual inscriptions; but we now come to a series of kings of whom there is evidence to show that their home was in India and that any extension of their power was made westwards from India up the Kábul valley and who were more Indian than Greek in their habits. General Cunningham would include in this category the names of Antimachus

Nikephoros, Philoxenus Aniketos, Nikias Soter, Lysias Aniketos, Antialkidas Nikephoros, Theophilus Dikaios, and Epander Nikephoros, who are known to us solely from their medals. Undoubtedly the death of Eukratides was the signal for disorder and his lieutenants everywhere hastened to carve out kingdoms for themselves. Those in Baktria were overcome by the Sakas, but for some time the cis-Himálayan satrapies remained in the hands of the Greeks. We must place the great expeditions of Apollodotus and Menander after the death of Eukratides (*i.e.*, after B. C. 140)[1], the former through Gujrát and Ajmere perhaps as far as Ujain and the latter through the Panjáb to the Jumna and thence through Oudh to the city of Patna. The number of the coins of Eukratides and the variety in their find-spots shows that he must have been one of the most powerful of the Baktrian kings; and the coins of Apollodotus and Menander, his successors, on numismatic evidence are comparatively as common. Strabo states that Menander crossed the Hypanis and penetrated eastwards as far as the Isamus,[2] and the author of the 'Periplus of the Erythræan Sea' notes that "even in his time[3] ancient drachmas were current at Barygaza (Broach) bearing in Greek characters the stamp of the kings Apollodotus and Menander who reigned after Alexander." In the epitome of Trojus Pompeius, also, the exploits of the Indian kings Apollodotus and Menander are referred to, so that it is probably to their expeditions that much of the local knowledge of the Yavanas proper is due.

Decline of the Greek power.

The coins bearing Greek inscriptions belonging to this time illustrate the state of the country. Most are of such a character as to indicate their common origin in time and type. The number of names show that there were several petty states and that after the death of Eukratides there was no single ruling family to whom all acknowledged allegiance. There are few indications to show the relation of these princes towards each other or the order of succession. We may perhaps, however, assign the Apollo series to Apollodotus, as we find the standing Apollo with a tripod on the reverse on his coins, which are closely imitated by Straton, Dionysius, Hippostratus and Zoilus,

[1] Appollodotus is supposed to be Bhagadatta, sovereign of Márwár. Weber, Hist. Ind. Lit., p. 181. [2] Not identified: Lassen agrees that Jomanes (Jumna) may have to be read: Wilford suggests the Rámganga under the name Suváma. [3] 290 A.D. according to Reinaud.

who may either be successors or lieutenants of Apollodotus: all bore the title 'Soter.' We now come to a class of coins consisting of degraded imitations of the pure Baktrian type with barbarous names of Indian and Parthian origin, of which those of Maues may be taken as the type. We have seen that the Parthians had occupied the country to the west of Arachosia, and they now seem to have advanced eastwards to India, for several of the earlier of these barbarian names may legitimately be referred to them. The type of the legends and figures on the coins of Maues at first approaches that of the coins of Demetrius, then we have imitations of the Apollo series and again the purely barbarian style. On some there are imitations of the horse and bow and quiver of the Parthian coinage.[1] Connected with the medals of Maues are those of Azes, which closely imitate the former, and from their number and the localities in which they are found show that he must have attained to considerable influence. We have coins of Azes with the names of his generals Aspapati and Asvavarma : a Vonones with Spalahara and with Spalagdama, also a Pakores and Abdagases, all of which indicate a Parthian origin.

It is difficult to decide when the use of the Greek language ceased in upper India, for we learn that the Indian embassy[2] to Augustus (B. C. 22-20) brought with them a document in Greek, written on parchment and purporting to be a communication from Porus or

[1] General Cunningham suggests that Maues was a leader of a tribe of Dahæ Skythians called Meds and represented by the Mers of the present day: Arch. Rep., II., 59. The Meds are mentioned by Ibn Khurdádba as robbers at the end of ninth century: Dowson's Elliot, I., 15. 'There is much to be said in favour of an early Parthian settlement in the Indus delta. Târânátha in a curious passage (La Comme's Vassilief, p. 51) tells us that in the time of the Magadha King Darmachandra, the Turushka King was ruling in Kashmír and at Multán and Lahore the Persian (Parthian) King Hunimanta, who attacked Darmachandra and subdued Magadha and demolished its temples. The priests fled and Darmachandra died and was succeeded by his son Kanakachandra; who found himself a tributary of the Turushka. His cousin Buddhapaksha, who reigned in Benares, slew Hunimanta in battle and restored the law of Buddha, and under this king the Nalanda temple was destroyed and with it the records of the Mahâyâna school. Although there is no evidence to show that Nahapána of Gujrát was a Parthian as supposed by some (J.B.B.R.A.S., VIII., 233; IX, i., 139). Gotamiputra takes credit for his victories over Sakas, Yavanas and Palhavas or Parthians (Parthavas), and amongst them the successor of Nahapána. The author of the 'Periplus of the Erythræan Sea' distinctly remarks of the Indus delta that the Indus had seven mouths, on the principal of which was Barbariken, a trading seaport. 'Before this town lies a small islet and behind it in the interior is Minnagar, the metropolis of Skythia, which is governed however by Parthian princes who are perpetually at strife among themselves, expelling each the other' (Ind. Ant., VIII., 139). Arrian (150 A.D.) places the Astakenoi and Assakenoi to the west of the Indus as far up as the Kábul river, and these were formerly subject to Assyria and then after a period of Median rule submitted to the Persians (*Ibid.*, IV., 85). [2] J. R. A. S., XVII., 309.

Phor as he is called in the local records. We know that writing on parchment was not an Indian custom, though it is reported of the people of An-sik (Parthia) as early as B. C. 120 by a Chinese author,[1] and therefore we may reasonably identify Porus with one of these barbarian Parthian kings. Again, according to Apollonius of Tyana, Greek was spoken in the Panjáb even by villagers[2] up to the middle of the first century after Christ. Our estimate of the state of the country west of the Indus is further confirmed by the statement of the Chinese author regarding Sarangia that the inhabitants were very numerous and were continually electing petty sovereigns, and that therefore Parthia took the country under its protection. There is nothing to show that at this time (first century before Christ) there was one paramount power in upper India, but that on the other hand there were numerous petty principalities of Baktrian or Parthian origin is abundantly proved from the coins. These gradually show less and less of Greek influence until we come to the Kadphises series, but here we may conclude our researches into the history of the Yavanas pure and simple, for we can identify the author of the Kadphises group with the immigrant Skythians and Turks. We shall, however, add the references to the Yavanas in the local records to complete the subject.

Yavanas in the Hindu records.

In the *Vishnu Purána* the Yavanas are said to be sprung from Turvasu and, as we have seen,[3] are placed to the west of Bhárata. They occur between the Mlechchhas and Chínas in the list of the Mahábhárata,[4] and are also one of the nations that Sagara was about to destroy when prevented by Vasishtha. In the chapter on the future kings of India in the Vishnu Puráṇa, eight kings of the Yavanas are placed between the Sakas and Tushárás[5] and the Váyu gives them a reign of 82 years, and there was also a dynasty of Kilakila Yavanas.[6] Some records call them Yavanas in religion, manners and polity, and the *Bhágavata* mentions the names of five of their princes Bhútananda, Vangiri, Sisunandi, Yasonandi and Pravíraka. The *Váyu* makes Pravíra, a son of Vidhyasákti, who reigned in

[1] *Ibid.*, X., N. S., 298. [2] *Ibid.*, XVII., 78. [3] *Antea*, page 357.
[4] *Antea*, page 358. [5] *Antea*, p. 384 [6] Identified by Mr. Bhau Dáji from the Ajanta inscriptions with a dynasty ruling in Vákátaka, a province between the Bay of Bengal and the Sri Saila hills south of Haidarabad, and who ruled in eastern India shortly after the Sáhs. J. B. B. R. A. S., VII., 53 : VIII., 248.

Kánchanapuri. The founder of the Sunga dynasty in Magadha is said to have engaged in conflict with the Yavanas on the Indus.[1] In a passage of the Mahábhárata translated by Wilson[2] it is stated that "all countries have their laws and their gods; the Yavanas are wise and pre-eminently brave." They are mentioned in the edicts of Asoka and in the Allahabad inscription of the Guptas. Pánini refers to 'the writing of the Yavanas' in illustration of one of his grammatical rules, but we are not in a position to fix his date.[3] But it is from their influence on the writings of the Hindus, and especially on the works devoted to astronomy, that the extent of their relations with India may be gathered. The Indian astronomers write of the Yavanas as their teachers.[4] Varáha-mihira, who lived in 504 A. D., gives not only the entire list of the Greek names of the zodiacal signs and planets, but he also directly employs several of the latter side by side with the Indian names as well as translations from the Greek of technical terms. It is unnecessary to continue our search after the allusions to the Yavanas in the Hindu records, and we shall merely add the following references collected by General Cunningham.[5] In the *Milinda-prasna*, or 'Questions of Milinda,' there[6] is a long disputation between Nágárjuna and the Yavana Milinda, raja of Ságal. The time and place lead us to identify this prince with the Greek Menander, raja of Sákala or Sangala[7] in the Panjáb between the Chínáb and the Ravi. Dr. Kern quotes a fragment of the *Gárgi-sanhita* of the astronomer Garga written about B.C. 50, in which after mentioning Sálisuka, one of the Maurya princes who died in B. C. 200, Garga says:—"Then the viciously valiant Yavanas, after reducing Sáketa, Panchála, Mathura, will reach (or take) Kusumadhwaja (Palibothra), * * * Pushpapura (Palibothra) being reached (or taken), all provinces will be in disorder assuredly." Sáketa is Oudh, Panchála we have already explained,[8] Muthra was the chief city of the Surasenas and Palibothra is Patna, the city of Chandragupta, Asoka and Sophagasenus, with whom the Baktrian kings had held friendly relations. Another passage, referring to the Greeks in India, is taken from Patanjali's commentary on Pánini by Dr.

[1] Wilson Hind. Theatre, I., 347. [2] As. Res., XV., 109. [3] Weber, p. 221. [4] *Ibid.*, 251, and Kern's translation of the *Brihat-Sanhita* in J. R. A. S., IV., V. [5] Num. Chron., X., 224. [6] J. A. S., Ben., 1836, page 516; Rhys David's Buddhism, p. 96: Hardy's Manual of Buddhism, p. 532, 2nd ed. [7] Cunn. Anc. Geogh., p. 180. [8] P. 360.

Goldstücker,[1] where he says :—"The Yavana besieged Ayodhya ; the Yavana besieged the Mádhyamikas." Here Ayodhya is the sacred Ajudhiya in Oudh and the Mádhyamikas are the people of the middle-country (Madhyadesa) including the Gangetic districts south of Panchála and north of the delta. Patanjali gives the word 'besieged' in the imperfect tense as an illustration of the rule that this tense should be used "when the fact related is out of sight, notorious, but could be seen by the person who uses the verb ;" so that, as observed by Dr. Goldstücker, it may be considered Patanjali was contemporary with the event. Now Patanjali lived towards the middle of the second century before Christ, a date which will correspond very well with that to be assigned to Menander on other grounds. In the lists of the kings of Magadha we have the name Pushpamitra, who lived between B. C. 178 and 142. In the *Málavikágnimitra*[2] of Bhavabhúti, Pushpamitra, prince of Vidisa, a kingdom lying north of the Vindhyas (Bhilsa), before performing the great Asvamedha rite, is said to have let loose a horse that it might wander free over the earth for twelve months. The horse was attended by a guard under the command of his grandson Vasumitra and the party was attacked by some Yavana horsemen on the south side of the Sindhu river, which is identified by General Cunningham with the Sindhu river in Narwar. Táránáth, the Tibetan Buddhist historian, also states that the first invasion of India by foreigners took place during the reign of Pushpamitra and five years before his death, so that the great expedition of Menander in which he overran Oudh and the Gangetic valley as far as Patna cannot have been earlier than B.C. 147. From all these indications we cannot assign to the Yavanas[3] any direct connection with the Kumaun Himálaya, notwithstanding the statements of respectable authorities to the contrary.

Baktria in the classical authors.

We have now to return once more to Baktria and to the accounts that have survived of the tribes inhabiting the countries in its neighbourhood.

[1] Pánini, p. 230. [2] Wilson's Works. [3] See further Dr Rajendralala Mitra's essay. 'On the supposed identity of the Greeks with the Yavanas of the Sanskrit writers' in J. A. S. Ben., XLIII., i., 246, in which he considers the term 'Yavana' was the name of a country and of its people to the west of Kandahár which may have been Arabia, Persia, Media or Assyria, probably the last : subsequently it became the name of all those places and again of all trans-Indus casteless races, including the Baktrian Greeks of Kábul, but at no time referred exclusively to the Greeks of Ionia ; and with it read Weber's article in Ind. Ant., IV., 244.

Euthydemus in his negotiations with the Syrian king Antiochus III. (B. C. 208) urged[1] amongst other matters that "those wandering tribes who were spread in great numbers along the borders of the province were alike dangerous to them both, and that if ever they should gain admittance into it, the whole country must inevitably fall into barbarism." Sixty years previously the Parthians had won their independence and were steadily preparing for the encroachments which Mithridates afterwards made on the southern provinces of Baktria, though they too had to contend with barbarous foes from the east. We fortunately have several allusions to the inroads of the Skythians in the classical authors. Pliny[2] writes:—

"Beyond this river (the Oxus) are the peoples of Scythia. The Persians have called them by the general name of Sacæ, which properly belongs to only the nearest nation of them. The more ancient writers give them the name of Aramii. * * The multitude of these Scythian nations is quite innumerable: in their life and habits they much resemble the people of Parthia. The tribes amongst them that are better known are the Sacæ, the Massagetæ, Dahæ, &c. (19 names). Indeed upon no subject that I know of are there greater discrepancies among writers from the circumstances, I suppose, of these nations being so extremely numerous and of such migratory habits."

In the epitome[3] of Trogus Pompeius it is stated that the Sarancæ and the Asiani, Skythian tribes, took possession of Sogdiana and Baktria, and as this statement comes immediately before the allusion to the Indian exploits of Apollodotus and Menander, we may consider it as occurring immediately before their time. He further informs us that the Tochari received their kings from the Asiani, so that the two names must refer to one tribe. Curtius[4] states that the Skythians and Dahæ were the first to invade India. Strabo[5] writes that:—

"The Macedonians gave the name of Caucasus to all the mountains which follow after Ariana, but among the barbarians, the heights and the northern parts of the Paropamisus were called Emoda and mount Imaus: and other names of this kind were assigned to each portion of this range. On the left hand opposite to these parts are situate the Skythian and nomadic nations occupying the whole of the northern side. Most of the Skythians, beginning from the Caspian Sea, are called Dahæ Skythæ, and those situated more to the east Massagetæ and Sakæ: the rest have the common appellation Skythians, but each separate tribe has its peculiar name. All or the greatest part of them are nomads. The best known tribes are those who deprived the Greeks of Baktriana, the Asii, Pasiani (Asiani ?), Tochari and Sakarauli, who came from the country on the

[1] Num. Chron., IX., 134: Rawlinson's Herodotus, IV., 208. [2] Book VI., Ch. 19. [3] Num. Chron., X., 79. [4] VIII., 14. Vita Alexandri. [5] Book XI., Ch. 8.

other side of the Jaxartes opposite the Sakæ and Sogdiani, and which country was also occupied by Sakæ: some tribes of the Dahæ are surnamed Aparni,[1] some Xanthii, others Pissuri."

Arrian[2] identifies the Skythians to the north of the Jaxartes with the Sakas. Amongst these names we may refer the Asii and Pasiani to the same tribe as the Asiani of Trogus, and as this tribe belonged to the Tochari, there remains only the Sarancæ of Trogus, Sagaraukæ of Ptolemy, and Sakarauli of Strabo—all synonymous with the Sakas or Sús. The Chinese annals clearly show that the Yueh-ti or Tochari and the Sús were the only two barbarian tribes in this neighbourhood at this time.

During the reigns of Mithridates I. of Parthia and Demetrius of Baktria, the Skythians were continually making incursions from the east and were with difficulty repelled. Phrahates, the successor of Mithridates, called in their aid against the Syrians, but the Skythians arrived too late to take part in the war and the Parthian king refused to pay them or lead them against some other foe. They accordingly commenced to ravage Parthia itself and Phrahates fell in battle against them (in B. C. 126), in which his Greek mercenaries joined the enemy.[3] These Skythians can be none other than the Sakarauli branch of the Sús and the last of them to leave Ta-hia for the south, for we find that Artabanus II., uncle and successor of Phrahates, died a few years afterwards in a fight[4] with the Tochari, who must have been a branch of the Yueh-ti, the successors of the Sús in Baktria. The Sakas are further mentioned as giving the name Sakastene to the Paraitakene district in Drangia (or the valley of the Helmand), and their capital city was Sigal, now identified with Sekuha, one of the principal towns of Seistán.[5] From the above we learn that the Sakas were the principal tribe in the earlier immigrations of the Skythians and that to many Skuthæ and Sakæ were synonymous terms; at the same time they were divided into a number of clans, each having its own name, sometimes allied and sometimes at war with each

[1] See Cunningham, Arch. Rep., II., 47, for his speculation as to the modern representatives of these tribes. He connects the Aparni with the Abárs (p. 29-49); the Xanthii with the Játs (p. 54), and the Pissuri with the Paralatæ (p. 50). [2] B k. IV., i, 4. [3] Lindsay's Parthia, p. 13; Rawlinson's Sixth Monarchy, p. 109. [4] 'Scythæ' depopulata Parthia, in patriam revertuntur. Sed Artabanus bello Thogariis illato, &c.' Here the Skythians are distinguished from the Tochari, who are the Tusháras or Tukháras of the Puránas. [5] J R. A. S., IX., 19.

other, and that wave after wave of these clans poured across the Altái, pushing forward those that had preceded them. Our further illustrations are from Chinese sources.

Chinese annals.

In the Chinese works *T'sien Han-shu*, and *S'hi-ki* or 'Historical record,' we possess most valuable information on the state of the countries adjoining Baktria from the third century before Christ.[1] Mr. Kingsmill informs us that according to the unanimous tradition of the Chinese, the tribes of the founders of the Chinese power under the name Chows were driven from their original seats in the land of Ban by barbarous tribes known as Diks, later on called Hínyuk or Hündjuk. Allied with these were the Hímwans, the Hien-yun of modern Chinese. Both of these tribes are by the earlier writers of the Han dynasty connected with the Jung of the Chow authors, a name which by the time of the Hans[2] had become changed to Nú in the title of the Hiung-nú. From other sources we learn that a race called Yueh-ti occupied the provinces of Kansuh and the Tangut country to the east of the desert of Gobi in the third century before Christ, and that they were harassed by the Hiung-nú and fled before them westwards. The *T'sien Han-shu* records that in B. C. 221, 'the Tung-hú had become a formidable power and the Yueh-ti were in a flourishing condition. The Shen-yu of the Hiung-nú was named T'ow-man. The latter meeting with a reverse in his contest with T'sin moved northward.' Here mention is made of only three nations the Tung-hu, Hiung-nú and Yueh-ti. In B. C. 206, Maoudun,[3] the Shen-yu of the Hiung-nú, engaged in hostilities with the Yueh-ti, whom he defeated. In B. C. 176, in consequence of reprisals on the part of the Chinese, the Hiung-nú invaded and occupied the country of the Yueh-ti, while Laulan,[4] Wúsun, Húki and twenty-six neighbouring states submitted to them. The king of the Yueh-ti was taken prisoner and his barbarous conquerors made a drinking-cup from his skull.

From the *Shi-ki* of Szema Tsien[5] we learn that in B. C. 138 Djang-kien, Marquis of Po-wang, was sent as an envoy from China

[1] Wylie, J. Anth. Inst., Vols. 2, 3, 5, 9. [2] The founders of the modern empire of China. [3] Me-te of deGuignes. [4] Elsewhere it is said that Lau-lan and Gu-sze have walled cities adjacent to the great salt marsh which lay to the east of Khotan and west of Kansuh. [5] J. R. A. S., X. (N. S.), 294, by Kingsmill, whose translation differs in some essential respects from that given by M. de Guignes in 'Histoire de l'Academie Royale des inscriptions et Belles lettres,' XXV., li., 17, 1759.

to the Yueh-ti, to induce them to make cause against the common enemy, the Hiung-nú. Being compelled to pass through the Hiung-nú settlements along the northern face of the Kuen-lun, Kien was recognized and taken prisoner and detained there for ten years. When he succeeded in making his escape he travelled westwards for ten days and arrived at Da-wan, then occupied by the Yueh-ti, but not progressing in his negotiations, was sent on by the high road to Gang-gu. This latter country adjoined the territory occupied by the greater Yueh-ti, whose king Sze had been killed by the Hiung-nú and they had set up his heirs in his stead. The Yueh-ti had overcome Ta-hia and taken up their residence in that country, which was rich and fertile, and it is recorded that "they would rather be exterminated than submit to the Hiung-nú." From the Yueh-ti, Kien went on to Ta-hia and remained a year at Bingnan-shan. He was desirous of returning by Tibet, but was again captured by the Hiung-nú and detained until the death of their Shen-yu in B. C. 126, when he escaped to China and in B. C. 122 gave this interesting account of his travels.[1] From this record we know that in B. C. 128 the greater Yueh-ti had already occupied Ta-hia or Baktria. From other sources we learn that the Yueh-ti had found another named tribe named Su already settled in those countries and drove them to occupy the country to the north-east of Ferghana and the Jaxartes.

In these Sús we recognise the Sahas of the Puránas and the Sakaraulí, Sagaraukæ,[2] Saruncæ and Sacæ of classical authors. From the Marquis Po-wang we learn that they had been driven out of Kashgár as early as B. C. 138 and out of Tahia before B. C. 128. The Sus pushed onwards and occupied Kipin, a country which is often named in the Chinese annals and is also incidentally noticed by the traveller Fah-Hian. From a comparison of all the accounts, Kipin lay along the upper part of the sources of the

[1] Wylie, J. Anth. Inst., IX., 59. [2] Cunningham derives this name from the *Sagar*, or iron-headed mace, which was their national weapon. Arch. Rep., II., 33, 43. We read that Demetrius, son of Euthydemus, who certainly lived in the first half of the second century before Christ, carried his arms into the country of the Suras (Seres) and Phruri (Phauni, Phruni). Some refer the Phruni to the Grinæi Skythians of Ptolemy, who held Yárkand, and identify the Suras with the people of Su-le, an old name of Kashgár. According to Ptolemy the Sacæ lived to the south of the Grinæi Skythians, and this allocation of the tribes agrees well with the Chinese accounts. These Seres and Phruri are mentioned elsewhere with the Tochari and V. de St. Martin connects the Phruri with the Phaunas of the Indian records: see Num. Chron., IX., 143.

Kábul river and is the Hu-phi-na of Hwen Thsang (Yuen-chwang . It appears to have varied so much in its extent as to represent an ethnographical rather than a geographical term. The Yueh-ti were in turn pressed by the Ausuns or Ousuns, probably the people of Wu-sun[1] to the north-east of Da-wan described hereafter, and who following in the wake of Sús, occupied Tahia.

That the Yueh-ti were of the same race (not the same tribe) as the Sús may be considered probable from the fact that we have no record of there being other than three well-known nations of Skythians in this neighbourhood at this time : that the Yueh-ti tribes occur with the Sakarauli, a presumably distinct Saka name in the enumeration of Strabo, and that they are included with the Sús under the name Sacæ by most classical authors. Tahia, on its conquest by the Yueh-ti, was distributed into five governments or provinces, *viz.*, Hieou-mi, Chouang-mo, Kouei-chouang, Hy-tun and Tou-mi. So soon as the Yueh-ti had settled down in Baktria, one branch crossed into Kipin or Ariana and drove the Sús from the Kábul valley into the valley of the Helmand. The portion of Kipin annexed by the Yueh-ti was called Kao-fu[2] (Kábul) and its people are described as like the Indians in their habits and character. They were more merchants than soldiers, and before the conquest of the Yueh-ti, one part belonged to Parthia, one to the kings of India and one to the kings of Kipin. The conquest of Kipin was effected by Khiu-tsi-hi, the chief of the Kouei-chouang or Gu-shan tribe, a name of which we have traces in the city of Gu-sze near the great salt marsh to the west of Tangut. Khiu-tsi-hi reduced the leaders of the other four tribes[3] to submission, declared himself king and imposed the name of his own tribe on the entire nation.[4] The conquest of Kipin took place about B. C. 38, for we

[1] Kang-keu was the Chinese name for Shighnán or Sogdiana, which appears to have been by Sakas (here Yueh-ti) as late as B. C. 40, and who were then at feud with the Wu-sun: Jour. Anth. Inst, V., 48. [2] Ma-twan-lin notes :— "The kingdom of Kao-fu was known in the time of the Hans. It is situated to the south east of the great Yue-che. It is likewise a considerable state. Their manners resemble those of the inhabitants of India and they are gentle and humane. They carry on much commerce with India. India, Kophene (Kábul) and the country of the Asæ are three kingdoms which are conquered by force and lost by weakness :" Ind Ant., IX., 15. [3] DeGuignes has the names Hieou-mi, Choam-mi, Kuei-choam, Hie-tun and Kao-fu, which last was established on the conquest of Kipin. Klaproth gives the names in the text. [4] Klaproth's Tableaux historiques de l'Asie, p. 133 : Paris, 1826: Lassen's Baktrian Coins, p. 168. Other names for the Gu-shan tribe are Kuei-choam Kwái-chang Gau-chang. The earlier coins of Kozou'o-Kadphises bear the name of the Greek king Hermæus on the obverse which would lead us to suppose that he supplanted a Greek ruler in Kábul at least.

read that it occurred a century after the deputation of Djang-kien to the Yueh-ti, who were then in Kashgár. Khiu-tsi-hi died at the age of eighty and was succeeded by his son Yen-kao-chang, who may be identified with the Hima-kadphises of the coins. Before examining these coins we shall give the geographical notices of the Chinese annals, which in every respect confirm the results arrived at independently from our examination of western records.

Geography according to the Chinese records.

Szema Tsien, the Chinese author to whom we are indebted for the account of the embassy of Kien, furnishes us in his *Shi-ki* with further geographical indications which shed much light on the political relations of this period. According to him Da-wan[1] lay to the south-west of the Hiung-nú territory and due west from China some 10,000 *li*. It had seventy subordinate towns and a population of about 100,000. "The soldiers use the bow and spear and shoot from horse-back. To the north lies Gang-gu; west, the country of the Yueh-ti; south-west, that of the Tochari[2]; north-east, Wú-sun; east, Han-mow and Yu-tien.[3] Wú-sun lies north-east of Da-wan about 2,000 *li*. Its people are herdsmen and of similar manners to the Hiung-nú. Its bowmen are 10,000 in number and they are daring and quarrelsome. Formerly they were subject to the Hiung-nú, but now they are in a prosperous condition. They marry their near relations and refuse to pay homage at court. Gang-gu[4] lies to the north-west of Da-wan. It is not so large as Da-wan, but is as large as the country of the Yueh-ti and the manners and customs of the people are similar. It can muster 80,000 to 90,000 bowmen. On the south it has relations with the Yueh-ti and on the east with the Hiung-nú. Im-tsai[5] (or Im-tsai ar-gan) lies to the north-west of Gang-gu some 2,000 *li*; it is as large and its customs are alike. It can muster 100,000 bowmen; it overlooks the great shoreless marsh reaching to the northern sea. Da-yue-ti[6] (or the country of the great Yueh-ti) lies west of Da-wan 2,000 or 3,000 *li*. The Yueh-ti dwell north of the Gwai-shui.[7] To their south is Dahia[8]; west, An-sih; north, Gang-gu. They are herdsmen and nomads with customs similar to those of the Hiung-nú. They can muster 100,000 to 200,000 bowmen. In former times

[1] Yárkand [2] On the upper affluents of the Oxus. [3] Khoten. [4] Part of Ferghana [5] On the Syr-darya. [6] The Dáhæ north of the Oxus? [7] Oxus. [8] Balkh.

they were rash and under-rated the power of the Hiung-nú and rejected all accommodation. The Hiung-nú attacked and routed them; Shen-yu the Lao-shang killed their king and made a drinking cup out of his skull. Formerly the Yueh-ti dwelt between Dun-hwang[1] and Ki-lín, when they were invaded by the Hiung-nú, they were compelled to emigrate to a distance. They passed Da-wan, invaded Da-hia on the west and overcame it. Following the course of the Dú-gwai-shui they fixed their royal residence on its north bank. A smaller portion of the tribe which was unable to accompany them sought the protection of the Giangs[2] of Nan-shan: this branch is known as the smaller Yueh-ti."

"An-sik[3] lies west of the Yueh-ti about 1,000 *li*. The country is open, the land tilled. It produces both rice and wheat. Distilled liquors are used. Its cities are like those of Da-wan; those dependent on it, large and small, are about one hundred in number. The extent of the country is about 1,000 *li* square. It is a very powerful state. It overlooks the Gwai. There are marts where the people and merchants meet to buy and sell. Carriages and ships are used for the transport of merchandise to neighbouring countries perhaps 1,000 *li* off. Silver is used in coins and the coins bear the likeness of their kings. When the king dies, the image is immediately changed for that of the new ruler. They write on skins of parchment and make books of it. To the west of An-sik is Tiaou-chi[4]: north, Im-tsai-ar-gan. Tiaou-chi lies about 1,000 *li* to the west of An-sik. It overlooks the western sea and is an agricultural country producing rice. There are great birds there producing eggs like water-jars.[5] The inhabitants are very numerous. They are continually electing petty sovereigns. In consequence An-sik has taken it under its protection, but treats it as a foreign country. The country is good but disorderly * * * Da-hia lies upwards of 2,000 *li* south-west of Da-wan, to the south of the Gwai-shu.[6] Generally speaking the country is open. It has cities and dwellings similar to Da-wan. It has no supreme sovereign; each city and town elects its own petty ruler. Its soldiers are weak and cowards in fight. The people are good as merchants. The Yueh-ti attacked it from the west and completely

[1] Now Sha chau in Kansuh. [2] Tibetans. [3] Parthia. [4] Sarangia. [5] The hue's egg. Yule's Marco Polo., II., 346. [6] Oxus.

subdued it. The population is numerous, probably over a million. Its capital is called Lam-shi-ching.[1] There are marts for the purchase and sale of merchandise. To its east lies Shin-duh.[2] Djang-kien[3] said that when he was in Da-hia he saw *keang*[4] bamboo staves and *shuh* (Sze-chuen) clothes. He asked whence they were obtained. The people of Da-hia said their traders went to the Indian markets. India is distant from Da-hia to the south-east about (several) 1,000 *li*. Generally speaking the country is settled and resembles Da-hia. Its climate is damp and hot. Its people use elephants in war." Thus ends this valuable succinct record.

The Saka Heraus.

Returning to the coins we find amongst those imitating apparently Arsacidan models an unique one[5] bearing on the reverse the legend—*ΤΥΡΑΝΝΟΥΝΤΟΣ ΗΡΑΟΥ ΣΑΚΑ ΚΟΡΡΑΝΟΥ*—'of the Saka king Heraus.' The last word '*ΚΟΡΡΑΝΟΥ*' is by some translated 'ruler' and is connected by them with the Homeric Greek *κοίρανος*, but besides the great improbability of a Homeric title being revived for the first time by a barbarian king, we have evidence to show that the word is to be connected with the tribal name of the king.[6] On the coins of Kadaphes and Kadphises,[7] we have the forms '*choransu*,' '*korsu*,' and '*korsea*' in Greek, instead of '*korranou*' and '*kushan*,' '*khushan*' and '*gushan*' in Arian; and on those of Kanerki, Ooerki and Basdeo it occurs as '*korano*' on coins and as '*gushan*' in inscriptions. In the Mánikyála inscription[8] of Kanishka so often quoted in these discussions, Kanishka or Kanerki is styled "The increaser of the dominion of the Gushans" (*Mahárája Kaneshka Gushanavasa samvardhaka*), and in the Panjtar inscription[9] we have a second reference to a Gushan prince (*Maharayasa Gushanasa*). It is also worthy of remark that the word '*korano*' occurs only[10] on those coins where the Greek '*basileus basileon*' or 'king of kings' of the

Kadphises and Kadaphes.

[1] Darapsa, Zariaspa. [2] Shin-tuh in the Han annals: T'ëen-chuh in Ma Tuanlin. [3] Also called Chang Këen, the Tchang-kiao of de Guignes. [4] The name of a hill in Sze-chuen producing bambus with long joints and solid hearts known as male bambus in India. [5] Thomas in J. R. A. S., IX., 20. [6] Some connect the 'Su' in 'Su-Hermæus' and in '*Choran-su*' with the Sús or Sakas and the name Hermæus with Heraus. [7] Thomas' Prinsep, I., 145. [8] J. R. A. S., XX., 223. [9] Arch., Rep., V., 67. [10] The legend on the coin of Heraus may appear to be an exception, but his coin does not bear a title equivalent to 'king of kings, but merely that of satrap or *turannos*.

Greek legends is rendered by the Skythic equivalent '*rao nano rao.*' We have traces of the latter still in the old Indo-Skythic province of Gujrát[1] in the title 'Ra of Junagarh'; in Gilgit, where the old rulers had the title 'Ra' and the old name of which is 'Sargin'; throughout Rajputána and the Dakhin in the title 'Rao;' in most Rájput clans in the titles 'Rao' and 'Ráwat,' whilst the head man of Spiti is still called 'Nono,' and the honorific title 'Nana' is common amongst the Maráthas. It is not clear whether we are to regard the word '*korano*' as purely the name of a tribe or a ruling family and the equivalent of '*Gushan*' in the inscriptions or the name current in the tribe for a king or ruler and added on in the same way as '*Soter*,' '*Dikaios*,' '*Theos*' and the like. In any case it was a title characteristic of the Yueh-ti tribe and may possibly be still found in the name '*Rono*' applied to the most honoured clan in the Hindu-kush.[3] If the conjecture that Hima (Ooemo) Kadphises is one with Yen-kiao-chang be accepted we may assign to his father and the founder of the dynasty, Khiu-tsi-hi, the coins bearing[4] the legend *kozola-kadaphes choransu zathou*,' and on the reverse the legend—'*kushanga yathaasa kujula-kaphsasa sachcha dharmapidasa*,' 'the coin of the Kushang king Kujula-kaphsa, the crown of the true dharma.' Have we here[5] the Kushang clan of the Yatha or Ye-tha, a name by which the Yueh-ti were known later on? On a coin of Ooemo Kadphises we have the Baktro-Páli legend—*Maharajasa Rajadhirajasa sarva-loga-iswarasa Mahiswarasa Kathpisasa*—'Of the Mahárája, supreme king, lord over all people, the great lord, Kathpisa.' In Kujula-kaphsa or Kozola-kadaphes[6] we have the representative of the Kushang tribe; and if '*korano*' be taken to have the same meaning as '*kushang*' we have further members of the same family in the Turushkas of Kashmír—'*Rao nano rao* Kanerki *korano*,' '*Rao nano rao* Ooerki *korano*,' and '*Rao nano rao* Bazodeo *korano*.' Heraus the Saka also bears the title '*korano*' and he was certainly not of the Gushan clan of the

[1] Ind. Ant., III., 193. [2] Jesalmer, Bundi, Kachh, &c. [3] Biddulph's 'Tribes of the Hindoo-koosh,' p. 24. [4] Thomas' Prinsep, II., 203 and J. A. S Ben. [5] M Klaproth in his 'Tableaux historiques' writes (p. 135):—'Un auteur Chinois nous apprend que *Ye-ta* était originairement le nom de la famille de leurs rois et qu'il est devenu plus tard celui de toute la nation; on le prononce aussi *Yi-ta*. Leur empire s'écroula dans le septième siècle et les Ye-ta devinrent tributaires des Turcs'. [6] We have also a Kozoulo-kadphises who may be identified with this Kozola-kadaphes, but both names are read distinctly.

Yueh-ti. We may therefore suggest that the tribal name gradually became the title of the ruler, whether the family belonged to the Gushan clan of the Tochari or not, and that it was conferred on the governors of provinces and on such of the conquered race as had submitted, but were allowed to retain their possessions.

Kanerki-group.

Hima Kadphises or Yen-kiao-chang enlarged and consolidated the conquests of his father and extended his influence as far as the valley of the Ganges to a distance of 3,000 *li* from the Indus and there reduced the country of Tim-li and its capital Chao-ki-tching, neither of which has as yet been identified. The coins which according to numismatic evidence follow those of Kadphises and which are known as the Kanerki-group[1] bring us to a series of kings who are known to us by their coins and inscriptions and are also mentioned in contemporary records. Their names occur in a number of inscripitons in the Indian-Páli alphabet and dated in an unknown era which were discovered at Mathura (Muthra):—

Kanishka—*Mahárája Kanishka*, S. 9, 28.

Huvishka—*Mahárája Rájatirája devaputra Huvishka*, S. 33, 39, 47, 48.

Vásudeva—*Mahárája Rájatirája devaputra Vásu*, S. 44; and *Mahárája Rájatirája Sháhi Vásudeva*, S. 87, also with dates 44 and 98.

Many others with varying dates, but without mentioning the name of any king, were found in the same locality. We have named inscriptions in the Baktrian-Páli character of Kanishka (Bahawalpur) dated in *San.* 11, and again as '*Mahárája Kanishka Gushanavasa samvardhaka*,' dated in San. 18, at Mánikyála, and one of Huvishka as '*Mahárája Rájatirája Huvishka*,' dated in San. 51, on the Wardak vase: in the first and third the Greek names of the months are used. Besides these we have the inscriptions[2] found by Mr. Löwenthal at Zeda in the Yusufzai district in which occurs the words '*Kanishkasa Rája Gandharya*' of Kanishka Rája of Gandhára. There is also a Taxila record[3] in

[1] Thomas' Prinsep. I., 38, 124, 134: J. R. A. S., IX., 1, 155. Cunningham Arch. Rep., III, 38: V., 5: Anc. Geogh p 99. Thomas' Gupta Dynasty, p 16: Arch. Sur. West. India, 11., 31. J. A. S. Ben., XXXII., 140. [2] Arch. Rep. V, 57: J. A. S., Ben., 1863, 5. [3] J. R. A. S., XX., 227: J. A. S., Ben., 1862, 40.

which the Satrap Liako-Kusuluko speaks of the "78th year of the great king, the great Moga, on the fifth day of the month Panæmus." The Takht-i-Bahi inscription of the Parthian king Gondophares is translated[1] by General Cunningham :—"In the 26th year of the great king Guduphara in the samvat year three and one hundred (100+3), in the month Vaisákh, on the 4th day." Mr. Thomas would apply the Seleukidan era to the dates given in the Mathura inscriptions of Kanishka and Huvishka.[2] This era commenced in the year B. C. 312, and the difference is provided for by assuming the use of a cycle of 100 years, or as appears to be the custom in the north-west Himálaya, the suppression of hundreds in the dates in common use. Thus in Kashmír,[3] the year 24 is given as the date of the composition of the *Rája Tarangini* by Kalhana, but this really stands for 4,224 of the Kashmír era which began in B.C. 3,076. According to this scheme San. 9 of Kanishka's Mathura inscription represents B.C. 2-3. General Cunningham[4] and Professor Dowson[5] apply the Vikramáditya era to these dates, which brings out B. C. 48 for the same date, and Mr. Ferguson[6] assigns these dates to the Saka era, which would give us 87 A. D., and for reasons given hereafter we accept this as most in accordance with facts. The Huvishka of the inscriptions has been identified with the Ooerki of coins and the Kanishka of the inscriptions with the Kanerki of the coins; and in place of the Gushka or Jushka of the Kashmír chronicles we have Bazodeo or Devaputra Vásudeva, the Sháhi Vásudeva, a title reproduced in the Sahánu-Sáhi of the Kálaka legend noticed hereafter and in the Sahánu-Sáhi of the Gupta inscription on the Allahabad pillar. The legend on the obverse of the coins of these Turushkas is the same throughout, '*Rao nano rao* ——— *korano*,' merely differing in the name and the legend on the reverse. The indications derived from a study of the coins further show us that Buddhism was the favoured religion under Kanishka. The coins of Huvishka exhibit traces of the popularity of the Saiva forms, the worship of the sun-god and Iranian beliefs; but Basdeo's coins are almost

[1] Arch, Rep, II., 59; V., 59; Ind. Ant IX. 258. [2] Baktrian coins and Indian dates, J. R. A. S. IX., 1. [3] Dr. Bühler on Kashmír era, J B. B. R. A. S., XII., (1877). [4] Arch. Rep III., 29; V, 60. [5] J. R. A. S V. [6] J. R. A. S. IV. 81: XII., 259, which contains a valuable summary of the facts regarding the Saka and Vikrama eras: see also his Hist. Ind. Architecture, App. A.

entirely confined to the Okro (*ugra*) or terrible form of Siva clothed in Indian fashion with trident and noose (*pasu*) and attended by the bull Nandi. As Pasupati, Siva is still supreme in the hills from Garhwál to Nepál. The general result shows that, contrary to tradition, these princes were not synchronous.[1] Huvishka's date overlaps the earliest date of Vásudeva by a few years, if the latter has been correctly read; but we cannot reconcile Kanishka's dates with those of Vásudeva if they were brothers and contemporaries. We may reasonably hold that all that this legend intends is that they all belonged to the same race or family.

Notices of Kanishka.

The 'Chronicles of Kashmír' give us the names of Asoka, Jaloka and Damodara and, proceeds[2] with the narrative thus :—

"Ensuite régnèrent trois rois nommés Hushka, Jushka et Kanishka qui bâtirent trois villes designees par le nom de chacun d'eux. Jushka, roi vertueux construisit un vihâra et les villes de Jushkapura et de Jayaswâmi. Ces rois issus de la race des Turushkas étaient cependant protecteurs de la vertu. Ils bâtirent dans Sushka kshetra et dans d'autres contrées, des colléges des temples de Buddha et d'autres edifices. Pendant le long règne de ces rois le pays de Kashmír fut, la plupart de temps, entre les mains des Bâuddhas dont la force s'accroît par la vie errante. Alors cent cinquante ans s'étaient écoulés depuis l'émancipation du bienheureux Sâkyasinha dans le fond de ce monde périssable. Ensuite l'heureux Nâgârjuna fut souverain de ce pays."

And again[3] in the time of Lalitáditya we read :—

"Pour montrer manifestement l'empreinte de leurs chaînes, les Turushkas tiennent par ses ordres les bras en arrière et ont la moitié de leur tête rasée."

There is no doubt that the 'Chronicles' are in error in assigning only 150 years to the interval between the death of Buddha and the accession of the Turushka princes. Hwen Thsang makes the interval 400 years,[4] but in this he commits the same mistake that he made in the case of Asoka, who is placed[5] by him only 100 years after the death of Buddha. Though the initial point of Hwen Thsang's chronology is wrong as might be expected from the history of the early Buddhist church in China, his relative

[1] Mr. Rhys Davids (Buddhism, p 238) gives the order Huvishka, Hushka, Kanishka, but for this arrangement evidence is wanting. [2] Troyer II., 19. [3] *Ibid*, p. 140 : Lalitáditya reigned 695-732 A.D ; see *Ibid*, I., 502. [4] Mém. sur les Cont. Occ. I., 42, 106-7. [5] *Ibid*, I., 170.

chronology may be generally accepted and according to this Kanishka will have lived three hundred years after Asoka. Now we know that Asoka reigned[1] about B. C. 252-217, and therefore Kanishka may, according to Hwen Thsang, be placed about 53-89 A. D. If we refer Kanishka's dates to the Saka era his *samvat* 9 in the Mathura inscription will fall in 87 A.D. Both the Chinese and Tibetan annals contain a full account[2] of the great Buddhist council held by Kanishka under the presidency of Vasubandhu and at the instigation of the sage Pársvika at which five hundred monks were present and certain commentaries were composed which are mentioned by both Fah Hian and Hwen Thsang. The latter furnishes[3] us with still further indications of Kanishka's power in the following statement. When Kanishka ascended the throne :—

"Faisait sentir sa force redoutable aux royaumes voisins, et l'influence de ses lois se répandait dans les pays lointains. Il organisa son armée et étendit ses domaines jusqu'à l'est des monts Ts ung-ling (near the Pámir plateau). Les princes dépendants qui habitaient à l'ouest du fleuve craignant la puissance de ses armes lui envoyaient des otages." At this time :—"Il ne croyait ni au châtiment du crime, ni à la rémunération de la vertu ; il méprisait et calomniait la loi du Buddha." Whilst hunting one day Kanishka heard of the prophecy of Sákya that a king by name Kanishka would arise and build a stupa over his relics : "se flattant d'être désigné par l'ancienne prédiction du grand saint, il ouvrit son cœur à la foi et montra un profond respect pour la loi de Buddha."

On the spot he erected a great stupa, and this can be no other than the great stupa or tope at Manikyála[4] already referred to. The latest Roman coins found[5] with those of Kanishka in this tope bear the date B. C., 43 and these were worn and old. In a second tope opened during the Afghán war near Jalálabad[6] coins of Kadphises, Kanishka, Huvishka and the Empress Sabina, the wife of Hadrian, were found, and the last could not have been minted before 120 A. D. In many of the earlier Buddhist works Nágárjuna is made a contemporary of Kanishka though he was apparently

[1] This question is, however, by no means settled ; Kern makes Asoka to reign 270-234 B. C. Ind. Ant III. 79. The date of Buddha's Nirvana is also still unsettled ; the southern Buddhists place it in B C. 543 ; the Chinese in B. C. 1000 ; others in B. C. 1087 and again others in B C. 380. [2] Mém. I. 173 (Chinese) : M Csoma, As. Res. XX., p. 41 (Tibetan) : Schmidt, Gesch. der Ost. Mongolen, p. 315 (Mongolian) : La Comme's Vassilief, p 39, 47, who shows how Buddhism extended from Kashmír to the Káoul valley, Turkistán and Tibet. [3] Mém. I. 42, p. 107. [4] *Antea*. p. 403 and Thomas' Prinsep, I., 90, 138. [5] *Ibid.*, p. 148. [6] Progs. A. S. Ben., 1879, p. 265.

earlier, and it is said that it was through his labours that the Buddhist religion spread through Kashmír and thence throughout the Himálaya. He is the Nágasena of the Ceylonese books and it was with him that the Yona king Milinda held his celebrated disputation.[1] The *Dípavansa*,[2] written in the the fourth century, however, has the statement:—"The Thera who originated from the Kassapa tribe, Majjhima Durabhisára, Sahadeva, Mălakadeva, converted the multitude of Yakkhas (Yakshas, Khasas) in the Himavat and the Thera Mahárakkhita converted the Yavana region." It is probable, however, that by the last name Nágasena is intended as he was born of a Brahman family and received his initiation[3] at the hands of the Buddhist fraternity of the rock Rakkhita and converted "Milinda king of Ságal, in the country called Yon." In the vernacular Tibetan[4] Nágasena is called Lugrub and according to Westergaard's calculations lived in the first century A.D. He was the founder of the great Mádhyamika school of the *Mahâyána* or 'Great-vehicle', which has exercised such influence in northern countries. In the *Chaturvinsati-prabandha* of Raja Sekhara,[5] Nágárjuna is stated to have been a contemporary of Sátaváhana, a synonym for the founder of the Saka era. In Buddhist records the name of Kanishka is placed with that of Asoka as one of the great protectors of Buddhism, and on his death, or rather the fall of his dynasty, Brahmanising influences became supreme in Kashmír: so that when Hwen Thsang visited that country, he found there a king who was attached to Brahmanical views and who is identified by some with Pravarasena II. The summary[6] of Ma-twanlin informs us that Shin-tu extended from the south west of the Yueh-ti and the kingdom of Kábul (Kaofu) to the western sea and on the east to Pan-khi, and that the Yueh-ti slew the kings of those kingdoms and filled their places with generals to whom they gave the governorship. Having become rich and powerful by these conquests, they remained in power till the time of the later Hans who began to reign 222 A.D. Above we have seen that about this timo they were ousted from Kashmír by the Kritíyas and in the plains they were supplanted by the Guptas.

[1] *Antea*, p. 394. [2] Oldenberg's translation, p. 159. [3] Hardy's Manual of Buddhism, p. 534. [4] Sch'agentweit, Buddhism in Tibet, p. 30. [5] J. B. B. R. A. S, No 21, p 220. [6] Mém. II., 197.

Connected closely with the debased form of the coins of Basdeo and his imitators come those of the Kshatrapasa or satrap dynasty of Gujrát, amongst whom the name of Raja Kshaharáta Mahákshatrapa Nahapána is the first. The Násik inscriptions[1] show that his son-in-law Ushavadáta Dínikaputra was a Saka, and the coins, whilst giving clear legends in the Deva-nágari alphabet, imitate in their devices the forms of the Indo-Skythian coins and also bear rude imitations of Greek letters. These letters appear to be an attempt to copy the corrupt form of the legend '*Rao nano rao*' as seen on the later Turushka coins. Following and closely imitating the better class of 'Sinha' or so-called 'Sah' coins come those of the Guptas and then those of the Vallabhis, each of which on numismatic evidence alone is shown to have followed the other, and all that we know from inscriptions confirms this fact. Dr. Bhau Dájí would make this Nahapána a Parthian monarch and descendant of Phrahates and founder of the Saka era. But there is nothing to lead us to suppose that his influence was other than local, and the evidence inclines to show that he was not an ardent Buddhist. He was a Saka it may be presumed like his son-in-law and obeyed the same paramount authority that then held India, and that this was the Turushka ruler of Kashmír cannot be doubted.

Satraps of Gujrát.

We may therefore fairly conclude that the Saka era originated with Kanishka and that its initial date is to be referred to his consecration on the 4th March, 78 A. D. We cannot, however, ignore the current traditions on the subject that it was dated from the destruction of the Sakas by Sáliváhan. The Saka era is, however, so closely connected with that known as the Vikrama era commencing with

Vikrama and Saka eras.

[1] Ind. Ant., IX., 16. [2] J. B. B. R. A. S., VIII., 238. [3] *Ibid* p. 239: the name Sakasena occurs in an inscription in the Kanheri caves: see also Oldenberg Ind. Ant., X., 229, for an interesting note on the *Kshatrapa* series of coins. There is evidence both from the coins and the inscriptions to show that Nahapána was the head of one line of Kshatrapas and Chashtana was the head of another. As observed (J. B. B. R. A. S., IX., 1; XIII, 351) the coins of Nahapána are formed on an Indo-Skythian model showing the national weapons whilst the head has a Greek origin: the coins of Chashtana introduce the '*chaitya*' symbol instead like those of other South-Indian dynasties. On the connection between the Sakas and Parthians, see Cunn. Arch. Rep., II, 47. A coin of Zeionises has the legend '*Manigalasa Chhatrapasa putrasa Chhatrapasa Jihonisa*' = of Jihonia the satrap, son of the satrap Manigala,' and Cunningham makes him an officer of Kujula kara Kadphises. Arch. Rep., II., 168.

the new moon of March, B. C. 57, that the two must be considered together. We shall first take the local traditions. Both these eras are current in Kumaon ; the first occurs in the earlier historical documents and is used by the Khasiya population and the second appears in the later literary and religious compositions. According to the received Kumaon version of the Rájávali twenty-nine princes ruled in Indraprastha, beginning with Parikshit and ending with Lachhmi Chand. The last prince of this line was murdered by Mantri Mitrasena, who was succeeded by nine members of his family, ending with Mathimal Sena. He in turn was slain by his minister Bírbahu (or Dhírbahu), whose descendants ruled in Indraprastha for fifteen generations ending with Udai Sena. The names of the fourth dynasty are taken from my copy, Tod, Ward and Cunningham :—

My copy.	Reigned.	Ward I, 24.	Tod I., 46.	Cunningham, J. A. S. B., VII., 24
	Y. m. d.			
Dhiradhara ...	42 7 24	Dhoorandhara.	Dhoodsena.	Yonadhara.
Samdhuna ...	35 10 12	Senodibata.	Sendhwaja.	Senadhwaja.
Saina ...	41 10 8	Mahakataka.	Mahagunga.	Mahiganga.
Mahájaya ...	30 4 1	Maha-yodha.	Nada.	Mahajodha.
Biranatha ...	28 5 28	Nat'ha.	Jewana.	Sarma.
Jivaráma ...	42 2 15	Jeevana-raja.	Oodya.	Jivan-siráj.
Udayasaina ...	35 7 22	Oodaya sena.	Jehula.	Umed-sen.
Dhipála ...	52 3 8	Vindhachala.	Ananda.	Anandajala.
Rákshapala ...	26 0 0	Raja-pala.	Rajpala.	Rajapala.

My copy of the Rájávali states that Rakshapála (Rájapála) was slain by Sakadatta, who after a reign of 95 years was expelled by Bír Vikramáditya, that the latter reigned for 93 years and was slain by his successor Samantapála. Ward[1] writes:—"This last monarch (Rájapála) giving himself up to effeminate amusements, his country was invaded by Shakáditya, a king from the Kumaon mountains, who proved victorious and ascended the throne after Rájapála had reigned twenty-five years. The famous Vikramáditya in the fourteenth year of the reign of Shakáditya, pretending to espouse the cause of Rájapála, attacked and destroyed Shakáditya and ascended the throne of Dehli, but afterwards lost his life in a war with Shálivábana, king of Pratisthana, a country to

[1] Ward's authority is a Brahman named Mrityunjaya, whose work was published in 1808 A D. Could we have trusted these statements our work would have been much lightened, but in seeking for corroborative evidence, we have discovered their worthlessness and have by a series of negative conclusions arrived at some positive inductions as to the origin of the Khasas of Kumaon.

the south of the river Narmada. Vikramasena, the infant son of Vikramáditya, was raised to the throne, but was supplanted by Samudrapála, a yogi. Vikramáditya and his son reigned ninety-three years." Tod writes of Rájpála that "he carried his arms into Kumaon, but was killed by Sukwanti, the prince of that region under the Himálaya, who seized on Indraprastha or Dehli, whence he was expelled by Sakáditya or Vikramáditya." Tod again quotes from his authority : "Sukwanta, a prince from the northern mountains of Kumaon, ruled fourteen years, when he was slain by Vikramáditya, and from the Bharat to this period 2,915 years have elapsed." General Cunningham writes that Indraprastha was taken by Sakáditya or Sukwanti in B.C. 57, and was retaken by Vikramáditya Sakári. According to all modern tradition the author of the Vikrama era bears the title 'Sakárí' from having destroyed the Sakas, whilst Sáliváhana, who established the Saka era 135 years later, is held to be one with a second Vikramáditya who also triumphed over the Sakas. Mrityunjaya makes Sáliváhan the conqueror of the Vikramáditya, who slew Sukwanta ; so that we are in this dilemma that some Hindu legends refer to only one defeat of the Sakas, whilst in others the two eras are explained as commemorating two defeats. For the numerous references to Vikramádityas in the later Indian records from the inscriptions of Chandragupta onwards we must refer the reader to Wilford's celebrated essay in which he identifies some nine Vikramas and almost as many Sáliváhanas and endeavours to educe order from chaos with the result that one feels more bewildered than enlightened at the end of the argument.

Legends.

We shall now examine the evidence as to the age of Vikramáditya which may be reduced to three heads : (*a*) legends ; (*b*) express statements in authorities and (*c*) actual use in inscriptions. It would be unprofitable to state the legends at greater length than we have done, but one deserves some further notice as much conjecture has been built on it by many writers. It is found in the oft-quoted memorial verses containing the names of the nine gems of

Legend of the nine gems.

Vikramáditya's court. They appear to occur for the first time in a work called the

[1] Cunningham, Arch. Report, I., 139. [2] As. Res., IX., 117.

Jyotirvidábharana, which Hall[1] believes to be not only pseudonymous, but also of recent composition. The passage runs:—"Now has this treatise been composed by me in the reign of the august Vikramárka, Lord of Málava and most eminent king of kings; in the assembly of which same king Vikrama are, as assessors, Sanku, the eloquent Vararuchi, Mani, Ansudatta, Jishnu, Trilochana, Hari, and Ghatakarpara, and also other literary men, amongst whom Amara Sinha is first and these also belong to King Vikramárka's court: Satya, Varáha-mihira, Sruta Sena, Bádaráyana, Manittha, Kumára Sinha, and other astronomers, such as myself. Dhanwantari, Kshapanaka, Amara Sinha, Sanku, Vetála Bhatta, Ghatakarpara, Kálidása, the celebrated Varáha Mihira and Vararuchi are the nine gems in the court of King Vikrama." A description of the government is then given and the number of the soldiers of Vikrama, and that after destroying 555 millions of Sakas, he established the Saka era. Mention is next made of his conquest of "the Lord of the country of Rúm, the king of the Sakas," whom he brought to Ujjayini to adorn his triumphal entry. The author dates his work in Káli-yuga 3068 or B.C. 33, but the style and language is comparatively modern, and though he calls himself Kálidása and one with the author of the Raghuvansa, there are reasons for doubting the statement and Weber places him as late as the sixteenth century.[2] No argument for or against the existence of the Vikramáditya can therefore be derived from the occurrence of this tradition beyond this, that the writers named are known not to be earlier than the sixth century, and therefore cannot be referred to the first century B. C.

Abu Ribán al-Birúni.

We shall now quote the Musalmán writer[3] Al Birúni, who is after all the principal authority on Indian eras. He wrote in the early part of the eleventh century and gathered his information at first hand in India, and is trustworthy, careful and accurate in his remarks. After describing the eras in use amongst the Indians Al Birúni tells us that they ordinarily employed the eras of Sri Harsha, Vikramáditya, Saka, Ballabha and Gupta. The

[1] Benares Magazine, VII., 275 (1852) :see also Wilson, VI., viii., and Bháu Dáji, J. B. B. R. A. S., 1862, 26. [2] Hist. Ind. Lit, p. 201. [3] Fragments Arabes et Persanes inedits relatifs a l'Inde by M. Reinaud: Paris, 1845, and J. A. S. Paris, 4th Ser., IV., 280, Dowson s Elliot.

first was dated 400 years before that of Vikramáditya, but he adds :—

"J'ai vu dans l'almanach de Cachemire cette ère reculée après celle de Vikramâditya de 664 ans. Il m'est donc venu des doutes que jn'ai pas trouvé moyen de résoudre." This would give the year 607 A D. for the initial year of the era of Sri Harsha. The era of Vikramáditya himself was calculated by taking 342, which was multiplied by 3 and made 1026, to which was added the years of the Jovian cycle of 60 years that had passed. This might lead us to suppose that the era was not known until after 1026 and indeed Reinaud in a note on this passage states that it commenced in 959 A.D., but we have an inscription of this century expressly dating from the Vikramáditya era. Al Birúni then proceeds to discuss the Sáka era :—" L'ère de Saca, nommée par les Indiens Sacakála, est postérieure à celle de Vikramâditya de 135 ans. Saca est le nom d'un prince qui a régné sur les contrées situées entre l'Indus et la mer. Sa résidence était placée au centre de l'empire dans la contrée nommée Aryavartha. Les Indiens le font naître dans une classe autre que celle des Sakya : quelques uns prétendent qu'il était un Soudra et originaire de la ville de Mansoura. Il y en a même qui disent qu'il n'était pas de race indienne et qu'il tirait son origine des régions occidentales. Les peuples eurent beaucoup à souffrir de son despotisme, jusqu'à ce qu'il leur vînt du secours de l'orient. Vikramâditya marcha contre lui, mit son armée en déroute et le tua sur le territoire de Kerour, situé entre Moultan e la château de Louny. Cette époque devint célèbre, à cause de la joie que les peuples ressentirent de la mort de Saca et on la choisit pour ère, principalement chez les astronomes."

Here the Saka era is clearly assigned to the destruction of the Sakas by Vikramáditya. Al Birúni however adds :—

D'un autre côté, Vikramâditya reçut le titre de '*Sri*' à cause de l'honneur qu'il s'était acquis. Da reste l'intervalle qui s'est écoulé entre l'ère de Vikramâditya et la mort de Saca prouve que le vainqueur n'était pas le célèbre Vikramâditya mais un autre prince du même nom." It is somewhat satisfactory to see that the difficulties regarding the assignment of this era are as old as the eleventh century.

Al Birúni then explains the Ballabha and Gupta eras : —

"Ballaba, qui a donné aussi son nom à un ère était prince de la ville de Ballabha, au midi de Anhalwara, à environ trente yojanas de distance. L'ère de Ballabha est postérieure à celle de Saca de 241 ans. Pour s'en servir, on pose l'ère de Saca et l'on en ôte à la fois le cube de 6 (216) et le carré de 5 (25). Ce qui reste est l'ère de Ballaba. Quant au Gupta Kâla (l'ère des Guptas) on entend par le mot *gupta* des gens qui, dit-on, étaient méchants et puissants et l'ère qui porte leur nom est l'époque de leur extermination. Apparement, Ballaba suivit immédiatement les Guptas; car l'ère des Guptas commence aussi l'an 242 de l'ère de Saca. L'ère des astronomes commence l'an 587 de l'ère de Saca. C'est à cette ère qu'ont été rapportées les tables Kanda Khátaka de Brahmagupta. D'après cela en s'en tenant à l'an 400 de l'ère de Yezderdjed, on se trouve sous l'année 1488 de l'ère de Sri Harsha, l'an 1088 de l'ère de Vikramâditya, l'an

953 de l'ère de Saca, l'an 712 de l'ère de Ballaba et de celle des Guptas. D'un autre côté, les tables Kanda-Khâtaka comptent 366 ans, le Pancha Siddhantaka de Varâha Mihira 526 ans, la Karana Sára 132 ans et la Karana Tilaka, 19 ans. Les années que j'assigne aux tables astronomiques sont les années adoptées par les indigènes eux-mêmes afin de donner plus d'exactitude à leurs calculs. * * * Déjà je me suis excusé sur l'imperfection de ce qui est dit ici et j'ai averti que les résultats que je présente offraient quelque incertitude, vu les nombres qui excèdent celui de cent. Je ferai remarquer de plus que j'ai vu les Indiens, lorsqu'ils veulent marquer l'année de la prise de Somnath (par Mahmud) événement qui eut lieu l'an 416 de l'hégire et l'an 947 de l'ère de Saca je les ai vus écrire 242 puis au-dessous 606 puis encore au-dessous 99 enfin additioner le tout ensemb'e ; le qui donne l'ère de Saca. On peut induire de lá que le nombre 242 indique les années qui précèdent l'époque où les Indiens commencèrent á se servir d'un cycle de cent et que cet usage commença avec l'ère des Guptas. D'après cela, le nombre 606 indiquerait les samvatsaras de cent complets, ce qui porterait chaque samvatsara à 101. Quant au nombre 99, ce seraient les années qui se sont écoulées du samvatsara non encore révolu, c'est ce qui est en effet: j'ai trouvé la confirmation et l'éclaircissement de cela dans les tables astronomiques de Durlab, le Moultanien : on y lit :—" cris 848 et ajoute le Loka-kála, c'est-á-dire, le comput du vulgaire ; le produit marquera l'année de l'ère de Saca." En effet, si nous ecrivons l'année de l'ère de Saca qui correspond à l'année actuelle et qui est[1] l'année 953 et que nous retranchions de ce nombre la quantité 848 il restera 105 pour la Loka-kála, et l'année de la ruine de Somnath tombera sur la nombre 98." This Loka kála was in use in Kashmír, but the cycle varied according to the place. " Les personnes qui se servent de l'ère de Saca et ce sont les astronomes, commencent l'année au mois de Chaitra.[2] On dit que les habitants de plusieurs des contrées qui sont voisines de Cachemire font commencer l'année au mois de Bhádrapada[3] et qu'ils comptent en ce moment 84 ans. Ceux qui habitent entre (Baradari) * * et Mári la font tous commencer au mois de Kártika,[4] et ils comptent maintenant 110 années. On pretend que les peuples du Cachemire se trouvent à present dans la sixième année de leur cycle. Les inhabitants de Nairhar au dela de Mári jusqu'aux limites de Tákeshar et de Lohâor commencent tous leur années au mois de Mankher[5] et sont maintenant arrivés à leur 188e année ; ils sont imités en cela par les habitents de Lanaik, je veux dire Lamghan. J'ai entendu dire aux habitants du Multan que tel était aussi l'usage des habitants du Sind et de Kanauj et que dans ces pays, on avait coutume de commencer l'année à la conjonction du mois de Mankher ; pour les peuples de Multan, ils ont renoncé, il y a un petit nombre d'années á cet usage, et ils ont adopté la méthode suivie en Cachemire, c'est-à-dire qu'à l'exemple des Cachemiriens ils commencent l'année à la conjonction du mois de Chaitra."

Observations on Al Birúni's account.

This extract gives us the only notice from Arabian sources that can be relied upon regarding the chronology of the Hindus at this early period. There

[1] This shows that this chapter was written by Al Birúni in 1031 A.D. [2] Chait, March-April. [3] Bhádon, August-September. [4] Kártik, October-November. [5] Mangsir, November-December.

can be no doubt but that Al Birúni correctly represents the opinions current in his time, and he shows conclusively that even then contradictions were rife that could not be explained. His description of the mode in which he saw the people calculate the Saka era is interesting. The person using the era first put down the number 242 and then added to it the cycles of 101 years that had elapsed and then the number of years in the current cycle. Thus the year 947 Saka was obtained by putting together 242 + 606 + 99; and Al Birúni gives as his opinion that 242 Saka was the year of that era in which it was introduced into use in the country in which he then was. This would give us 319-20 A. D., or the initial date of the local era adopted by the Brahmanising Vallabhis as distinguished from that of the foreign Indo-Skythian Buddhists. This date marks the decline of the Turushka dynasty in Kashmír, and all indications lead us to suppose that early in the fourth century there was a great Indian revival in the countries to the south-east of the Indus. For some reason unknown to us the Arabian writer styles the Guptas 'a wicked and powerful race,' but this may simply mean that they were opposed to the people of the country in which Al Birúni was at the time and from whom he received his information and cannot be considered as an expression of critical opinion on his part regarding their conduct. There is no doubt that Al Birúni is wrong in assigning, in accordance with the popular tradition when he wrote, the initial date of the Saka era to the destruction of the Sakas, for as we have seen that race was a power in India long subsequent to the year 78 A. D. It is not our intention to discuss here the initial date of the Gupta era or to explain the second error of Al Birúni in assigning the initial date of the Gupta era to that of their extermination. The Vallabhi inscriptions are dated from 311 to 348 in an era beginning in 319 A.D., but it does not follow that the Gupta dates can be referred to the same initial date. Indeed General Cunningham gives good grounds for believing that the initial date of the Guptas is 167 A. D., and this we shall consider hereafter. However, Al Birúni's errors are clearly those of his informants, and had he stated anything else, we should

[1] On the Guptas, see Mr. Fergusson, J. R. A. S., IV., 81; XII., 259: Mr Thomas' Gupta Dynasty, London, 1876: Dr. Oldenburg, In. Ant X, 213: and General Cunningham, Arch Rep, IX., 16, and X., 112, where the subject is fully discussed in detail.

have good grounds for doubting his veracity, for as we have seen the popular legend regarding the origin of the Vikrama era was current in his time.

Chronicles of Kashmír.

Before proceeding further we shall quote the passages in the 'Chronicles of Kashmír' bearing on the question of Vikrama and his date and for this purpose will quote from Troyer's translation[1] :—

"Dans le même temps (the death of Hiranya) l'heureux Vikramâditya appelé d'un autre nom Harsha, réunit comme empereur á Ujayini l'empire de l'Inde sous un seul parasol. La déesse Sri servit ce roi qui était comblé d'un bonheur merveilleux, en s'attachant á lui avec plaisir, ayant abandonnée pour lui les bras de Hari et les quatre océans. Employant la fortune comme moyen d'utilité, il fit fleurir des talents c'est ainsi qu'encore aujourd'hui les hommes des talents se trouvent la tête haute au milieu des riches. Ayant d'abord détruit les Sakas il rendit léger le fardeau de l'œuvre de Hari, qui doit descendre sur la terre pour exterminer les Mlechchhas."

Vikramáditya[2] placed the poet Matrigupta on the throne of Kashmír. In an earlier[3] passage it is stated :—

"Ayant fait venir ensuite, d'un autre pays, Pratápáditya, parent du roi Vikramâditya, ils le sacrérent souverain de l'empire. D'autres induits en erreur, ont écrit que ce Vikramâditya fut le même qui combattit les Sakas ; mais cette version est rejetée."

Here we have distinct mention of two Vikramádityas belonging to Kashmír, the earlier one at a distance of twenty-two reigns after the Turushkas and the later one after Toramána and Hiranya and clearly to be identified with the great Chakravartti Raja Vikramáditya. Toramána and Hiranya were brothers and the name of the former is known to us from inscriptions and coins. The inscriptions occur at Erán and Gwalior and the Erán inscription appears to be connected with that of Budhagupta dated in 165 of the Gupta era.[4] Mr. Thomas reads 180 on a coin of Toramána and Dr. Mitra read 180 plus some other figure on the Erán inscription.

Early use of the Saka era.

We have evidence of the very early use of the Saka era not only in India but in other Buddhist countries. According to Alwis,[5] "the era most familiar to the Ceylonese is the '*Saka Warasa*,' which is the year of some king of the continent of Asia whose name is Saka and who

[1] The authorities are Wilson's essay on the Hindu history of Kashmír in As. Res., XV., 1. which is only an abstract translation, and Troyer's text and translation, Paris, 1840. [2] Troyer, II., 75. [3] *Ibid.*, p. 43. [4] J. A. S. Ben., XXX., 277, Thomas' Prinsep, I. 340. On this Toramána question, see Cunningham, Arch. Rep., III., 310. [5] J. B. B. R. A. S., 1856-58, p. 184.

was said to be the head of the royal house of Yavana." According to Sir S. Raffles,[1] the Javan era is called that of *Ají-Saka*, on whose arrival in Java it is supposed to have commenced; it begins in 75 A.D. In Báli, the Saka era (*Saka Warsa Chandra*) is also in use and starts from 78 A D., and the difference between the initial era in Java and Báli is supposed to be due to the use of the lunar year by the Javans on their conversion to Islám and of the solar year by the people of Báli. One of the earliest Javan traditions makes Tritresta, the husband of Bramáni Káli of Kámboja, the first Indian immigrant in Java, and he was slain by another Indian adventurer, Watu Gúnung of Desa Sangala (Panjáb). In Siam,[2] the word for era is '*Sa-ka-rat*,' but there the sacred era commences with the Nirvána of Buddha and the popular era with the introduction of Buddhism in 638 A.D. In both Tibet,[3] China and Siam, the cycles of 60 years and of 12 years are also in use and, as we have seen, the cycle of 60 years was in common use in India at an early period.

In the Bádámi inscription[4] of the Chalukya Mangalíswara occurs the following statement :—" Sri Mangalíswara who victorious in battle—in the twelfth year of his reign—five hundred years having elapsed since the coronation (or anointment, *abhisheka*) of the king of the Sakas." Here we have a very clear and distinct statement that, as might naturally be supposed, the era takes its name from its founder. The ordinary expression in the grants of the Chalukyas in recording a date is in the same terms as the preceding; thus in the Aihole grant,[5] 'five hundred and six years of the Saka king having elapsed,' 'six hundred and sixteen years of the Saka[6] king having elapsed' and in an old Coorg document[7] when the eight hundred and ninth year of the time past since the Saka king was current.' None of these inscriptions give out an uncertain sound and in some hundreds of grants of the first eight centuries the Saka era is called the *Saka nripa kála, Saka kála, Sakendra kála, Saka bhúpa kála*, and the like, without any allusion

Saka era in inscriptions.

[1] History of Java, II., 66: Crawfurd's Hist Ind. Arch., I., 300. Buddhism appears to have been introduced into Ceylon in the third century before Christ: into Burma in the fifth century after Christ; into Siam in the seventh century, and into Java, Báli and Sumatra in the sixth century. [2] Crawfurd's Embassy to Siam, p. 330. [3] Schlagentweit, Buddhism in Tibet, p. 275. [4] Ind. Ant., III., 306; VI., 363; X., 57; Arch. Sur. West India, II., 237; III., 119. [5] Ind. Ant., V, 68; J. B. B. R. A. S., IX., 315. [6] Ind. Ant., VI., 91. [7] *Ibid.*, p. 103.

to the destruction of the Sakas and clearly showing that the era was named from the accession of a Saka king. In a Jaina legend published[1] by the late Dr. Bhau Dáji, a story is brought in to explain the origin of the Saka era which is in many ways very instructive for our purpose. Gardhabhilla, Rája of Ujain, is there said to have offended the sister of the sage Kálaka and paid no heed to the saint's remonstrances. Kálaka on this proceeded to the west bank of the Indus, where the kings were called Sáhi and, the supreme king had the title Sáhánu-Sáhi. He induced a Sáhi and a number of nobles to return with him to Hindukadesa (India) and proceeding by Gujrát they reached Ujain and dethroned Gardhabhilla. The Sáhi became Rája of Ujain and the nobles who accompanied him became feudal chiefs. Because they came from Saka-kúla, they were called Sakas and thus originated the '*Saka vansa.*' Vikramáditya, son of Gardhabilla, overthrew this Sáhi, but one hundred and thirty-five years afterwards a Saka again became king and introduced his era. Whilst corroborating the inscriptions as to the origin of the Saka era this legend introduces the modern explanation of the origin of the Vikrama era, which apparently first appears in the writings of the astronomers. Aryabhata, the oldest of the Indian astronomers, does not mention either the Vikrama or Saka era.[2] Varáha Mihira, who is supposed to have written towards the close of the sixth century, informs us that the *Sakendra-kála* commenced in the year 3179 of the Káli-yuga and again calls it as usual *Saka-bhúpa-kála.* Brahmagupta, who wrote in the seventh century, speaks of so many years having elapsed at the 'end of Sáka.' Bhattotpála, writing in the middle of the tenth century, explains the phrase '*Sakendra-kála*' thus:—"Saka means king of the Mlechchha tribe and the time when they were destroyed by Vikramáditya deva is properly known as Saka." Again Bhaskaráchárya, writing in the twelfth century, gives the years of the Káli-yuga "to the end of the Saka king," '*Saka nripánta.*' Even amongst the astronomers it was not until the seventh century that we find the slightest hint of the Saka era

Astronomers.

[1] J. B. B. R. A. S., IX., 139, 154, and Wilford in As. Res., IX., 150, 8vo. In an old Jaina work it is stated that 135 years after Vikrama having passed again the Sakas expelled Vikramaputra and conquered the kingdom. J. B. B. R. A. S., IX., 141. [2] J. B. B. R. A., S, VIII., 240: Weber's Hist. Ind. Lit., p. 251.

being considered as commemorating the destruction of the Sakas, and not even then was the Vikrama era in use.

Dr. Bhau Dáji states that we do not meet with the assertion that the Saka era commenced with the destruction of the Sakas until the eighth century, and again that not a single inscription or copper-plate grant is dated in the Vikramáditya Sanvat before the eleventh century, and this era was introduced on the revival of Jainism in Gujrát.[1] Even then there is much confusion in its use,

Scholars.

for the Svetambaras make their great teacher Mahávíra live 470 years before Vikramáditya, whilst the Digambaras make him live 605 years before Vikramáditya, the difference of 135 years being the exact time between the Vikrama and Saka eras. General Cunningham in one of his reports[2] writes:—"My impression is that Kanishka was the real founder of the era which is now known by the name of Vikramáditya. The Vikramáditya to whom tradition assigns the establishment of the era is now known to have lived in the first half of the sixth century A.D. I think it probable, therefore, that he only adopted the old era of the Indo-Skythians by giving it his own name. The earliest inscription that I am aware of dated in the Vikrama era is San. 811 or 754 A.D." Subsequently[3] he refers to an inscription at Jhalra Patan dated in San. 748 and alters Tod's assignment of it to the Vikrama era on the grounds that:—"As the *Sanvat* of Vikramáditya does not appear to have been in use at this early period the true date of the inscription, referred to the Saka era, will be 135 years later or 826 A.D." No better authority could be quoted for the inscriptions in the Bengal Presidency. Dr. Burnell states that the Vikrama-Sanvat is all but unknown in southern India except in the Dakhin.[4] Mr. Fleet shows that the date of Dantidurga (eighth century) is erroneously[5] supposed to have been recorded in both the Saka and Vikrama eras, and he adds[6]:—"As far as my experience goes it

[1] J. B. B. R. A. S, IX., 145, 242. [2] Arch. Rep., II., 68. [3] *Ibid.*, p 266. [4] Elements South Indian Palæography, p. 73. [5] Ind. Ant., VIII., 151. [6] *Ibid.*, p. 187. This Vikramáditya is reported in his inscription to have said:—"Why should the glory of the kings Vikramáditya and Nanda be a hindrance any longer? He, with a loudly-uttered command, abolished that (era) which has the name Saka and made that (era) which has the Chálukya figures," alluding to the foundation of the Chálukya Vikrama era which Mr. Fleet has shown to start from February 10, 1076. The mention of Vikramáditya here undoubtedly shows that the Vikrama era was known, but was not in use.

(the Vikrama era) was never used either before or after the time of Vikramáditya VI. (1075 A.D.) by the western Chalukyas and Chálukyas nor by the Ráshtrakútas, who temporarily supplanted them in western India; nor by the feudatories of those dynasties; nor by the eastern Chalukyas of Vengi." Dr. Bühler, however, quotes two early inscriptions assumed to be dated in the Vikrama era: (1) the Gúrjara grant[1] of Jayabhata of "the year 486, which seems to be dated in the Vikrama era"; and (2) the Páthan inscription[2] of Sanvat 802 recording the accession of Vanarája which "can be referred to no other era." But in both these instances there is room for very much doubt. From all that we have gathered concerning the use of this era these apparent exceptions will, hereafter, be explained. With regard to the latter we have a note of the editor to say: "Having examined this latter (Vanarája's inscription at Páthan) I am in doubt of its genuineness; possibly, however, it may be a copy of an older one; but if a copy may the mode of dating not possibly be an interpolation?" With regard to Jayabhata's grant the argument rests on certain assumptions that he must have been the son of Dadda I. and father of Dadda II. and that as his date is San. 486 and the records of Dadda II. are dated in Saka 380-417, the former date must refer to some other era and presumably to that of Vikramáditya. Now the genealogical portion of this date of Jayabhata has been lost and all the arguments advanced are so open to correction that we must decline to accept this solitary instance as evidence of the use of the Vikramáditya era at this early period. There is nothing to show why Jayabhata should depart from the practices of his predecessors and successors without expressly naming the new era. The third instance quoted by Dr. Bühler has been shown to be due to an error of the translator.[3] The name Sáliváhana so often connected in modern times with the Saka era does not occur in this relation in any ancient records or manuscript.[4] A Sátaváhana family reigned at Paithan on the Godávari when the Sinha dynasty ruled in Gujrát, and Gotamiputra or Sátakarni of this race is styled in an inscription as the 'establisher of the glory of the family of Sátaváhana'

[1] Ind. Ant., V., 110 [2] *Ibid.*, p. 112. [3] Ind. Ant., VIII., 151.
[4] J. B. B. R. A S., VIII., 237: Hemachandra makes Sátaváhana have the synonyms Hála, Sálaváhana, Sáláhana.

by reason of his conquests over the Sakas, Yavanas, Palhavas and his being the destroyer of the descendants of Kshaharáta. This power was of short duration, for Rudra Dáma in an inscription records his success against Sátakarni or Gotamiputra and the submission to him of the same countries that Gotamiputra, lord of Dakshinapatha, gives in his list of conquests. In the country where this Sátaváhana dynasty lived and ruled there is no attempt to assign to it any connection with the Saka era. We have now shown—

(*a*) that the Saka era was instituted by the Buddhist king Kanishka; that it spread though his influence to all Buddhist countries:

(*b*) that there is no early mention of its being intended to mark other than the anointment or consecration of the Saka king until the seventh or eighth century:

(*c*) that the Vikrama era was not used until at least the eighth century, and consequently that the popular traditions assigning both eras to victories over the Sakas are incorrect, and that there is no real connection between the name of the founder of either era and Kumaon.

We shall now inquire how these traditions arose.

There are three different reasons given for the founding of the Vikramáditya era:—

(*a*) that it was an invention of the astronomers:

The origin of the Vikrama era.

(*b*) that it was to commemorate the freeing of the people from debt:

(*c*) that it was to commemorate a great victory over the Sakas.

In the Jaina *Rájávali-kathe*, a work written in ancient Kanarese,[1] it is recorded that:—"Then was born in Ujjayini, Vikramáditya, and he by his knowledge of astronomy having made an almanac established his own era from the year Rúdirodgári, the 605th year after the death of Varddhamána." Now Varddhamána is the Jaina teacher Mahávíra, who died in B.C. 661, and consequently the Vikramáditya referred to lived in B.C. 56 and is one with

[1] Ind. Ant., III., 157.

the author of the Vikrama era. The accurate Al Bírúni notes that in his time the Vikrama era was used principally by astronomers and that the same class had another era used solely by them and which commenced in 665 A. D.

The Nepál annals tell us that:—"At this time[1] Vikramájít, a very powerful monarch of Hindustán, became famous by giving a new Sambatasara, or era, to the world, which he effected by liquidating every debt existing at that time in his country. He came to Nepál to introduce his era here * * and after clearing off the debts of this country introduced his Sambat." Hwen Thsang mentions[2] a Vikramáditya of Sravasti or eastern Oudh in whose reign lived a learned Buddhist named Manoratha, '*au milieu des mille ans qui ont suivi le Nirvána du Bouddha*" or "'*dans l'une des mille années qui ont suivi le Nirvána du Bouddha*," neither of which expressions is unfortunately intelligible. This Vikramáditya is said to have paid off the debts of his subjects and also to have oppressed the Buddhists and favoured the Brahmans and shortly afterwards lost his kingdom. Manoratha was evidently put to death by the Brahmans and Vasubandhu avenged him during the reign of Vikramáditya's successor. Táránátha states that Vasubandhu lived 900 years after Buddha and he was a pupil of Manoratha according to Hwen Thsang: so that the two authorities differ about the date. In Merutunga's *Therávali* it is stated[3] that:—"Gardhabilla's son Vikramáditya having regained the kingdom of Ujjayini and having relieved the debt of the world by means of gold, commenced the Vikrama Sambat era." And accounts are not wanting of petty rulers desirous of imitating Vikramáditya and starting an era of their own by paying off the debts of their people. We have two notable instances in the annals of Nepál and Kumaon. Of the third reason given for the establishment of the Vikrama era we have given sufficient examples. That there was a great Vikramáditya in the sixth century there can be no doubt, but that he had anything to do with the era which bears his name requires further proof. This Vikramáditya reigned shortly after Toramána, Raja of Kashmír, and in the Kashmír chronicles is specially praised for his liberality.

[1] Wright's Nepál, p., 131: the time will be discussed hereafter; it was about the end of the sixth century. [2] Mém., I., 115. [3] J. B. B. R. A. S., IX., 147, 148.

From Táránátha[1] we learn that on the death of the Buddhist king Gambhirapaksha, Sri Harsha, born in Maru, abolished the teaching of the Mlechchhas by massacring them at Multán (but a weaver of Khorasán spread it anew) and laid the foundations of great Buddhist temples in the kingdoms of Maru, Málava, Mewára, &c. This Sri Harsha was succeeded by his son Sila, who reigned about 100 years. The contemporary of Sila in the west was Vyákula, King of Ma-mha, who raised himself by force over Sila and reigned thirty-six years. This account calls to mind Hwen Thsang's description of Siláditya of Kanauj. From him we learn[2] that Siláditya ascended the throne in 610 A.D. His father was Prabháka-Vardhana and his eldest brother Rája Varddhana preceded him on the throne, but being slain by Sasángka, Raja of Karna-Suvarna, the minister Báni and the people placed the younger brother Harsha-Vardhana on the throne with the title Siláditya. He suffered reverses at the hands of Satyásráya or Pulakesi II., the western Chalukya Raja of Bádámi, as recorded by Hwen Thsang,[3] Ma-twan-lin[4] and in several inscriptions[5] of Pulakesi himself and his successors. We know that Siláditya was a zealous Buddhist himself, but was very tolerant towards Brahmans: of his father we know but little. His grandfather appears to have been a Siláditya of Málwa and to have succeeded the great Vikramáditya there. Táránátha tells us that the Sri Harsha Vikramáditya, the exterminator of the Mlechchhas, was succeeded by a Sila, and Hwen Thsang shows that the successor of Vikramáditya was a favourer of the Buddhists. Sri Harsha lost his kingdom probably through the enemies that he gained by his victory at Multán. Over a hundred years later the Buddhists lost everything with Siláditya of Kanouj. It is his death that marks the true era of Brahmanical ascendancy. With it came the preponderance of Hindu revivalistic ideas in religion and missionaries poured forth from southern and western India and gave the last touches to the complete restoration of Brahmanism. In Magadha, Nepál and Kumaon, the rulers for some time remained faithful to Buddhism, but the advocates of Sivaism and especially the apostles of Tantric beliefs were numerous and powerful, and it would appear that the great mass of the people followed them.

[1] La Commes' *Vassilief*, *p.* 52 : Ind. Ant., IV., 364. [2] Mém., I., 247. [3] *Ibid.* [4] Ind. Ant., IX., 19. [5] Ind. Ant., V., 72; VI., 78, 87, amongst others.

Al Birúni has, as we have seen, mentioned the great battle at Kohrúr between the city of Multán and the fort of Lúni, which can be no other than that noticed by Táránáth. The Aphsar inscription referring to Dámodara Gupta states that:—"While gloriously dispersing at the battle of Maushari[1] the roaring line of elephants of the fierce army of the western Hunas, he fainted and selected the nymphs of heaven." In other words Dámodara perished in the battle of Maushari. Thus we have confirmation of the statement that the Guptas on one side and Vikramáditya on the other were determined opponents of the Sakas. Mr. Fergusson[2] has arrived at the same opinion and states:—"What appears to have happened is this: about or before the year 1000 A.D., the struggle with the Buddhists was over and a new era was opening for the Hindu religion and a revival among the Hindu dynasties, and it was then determined to reform the calendar in a sense favourable to the new state of affairs. * * * In consequence of this, in looking back through their history for some name worthy to dignify the era and some event of sufficient importance to mark its commencement, they hit on the name of Vikramáditya as the most illustrious known and the battle of Kohrúr as the most important in his reign." They then established the era by adding ten cycles of 60 years each to the date 544 A.D., and thus arrived at B.C. 56. This is a possible explanation, but there is no absolute necessity for connecting the great Vikramáditya's victory at Kohrúr with the era that bears his name. It is more probable that it was introduced for astronomical purposes like another similar era quoted by Al Birúni and that this was done when Ujain was made the meridian of India. It did not come into general use[3] even amongst astronomers before 1000 A.D. On this question Holtzmann[4] pertinently remarks that:—"To assign him (Vikramáditya) to the first year of his era might be quite as great a mistake as we should commit in placing Pope Gregory XIII. in the year one of the Gregorian calendar, or even Julius Cæsar in the first year of the Julian period to which his name has been given, that is in the year B.C. 4713." There is absolutely nothing on record regarding the first century before Christ, not even excepting the

Battle of Kohrúr.

[1] J. A. S. Ben., XXXV., i., 273. J. B. B. R. A. S., X., 60. [2] J. R. A. S., XII, 274. Kohrúr was the capital of the Karlúki Fazáras, Arch. Rep., II., 19.
[3] Kern in Introd. *Brihat-Sanhita*, p 5. [4] Weber's Hist. Ind. Lit., p. 202.

Yueh-ti conquest of the Sakas in Kipin, that would indicate a victory in Brahmanical interests, and this Yueh-ti success is not likely to have been the cause of the Brahmans fixing on 57 B.C. as the initial year of the era. The great Vikramáditya may have displaced a Buddhist family in Malwa and he himself was succeeded by the philo-Buddhist Siládityas, and Siláditya's namesake and descendant was again followed by Brahmanical rulers, and the facts concerning the troubles of this period were moved back to adorn the legendary but obligatory explanation of the origin of the two eras. Another suggestion is derived from a passage in Strabo, in which he states:—"The Sakæ occupied Baktriana and got possession of the most fertile tract in Armenia which was called[1] after their own name Sakasene." This colony was exterminated by the Persians; who in remembrance of their victory instituted an unusual festival called Sakæa. Many of the Indian legends concerning the great Vikramáditya contain facts connected with the history of the Kings of Persia, such as the surrender of the Roman Emperor and his being brought in chains to Ujain, which can only allude to the capture of Valerian by Shápúr in 260 A.D. The institution of the Sakæa is attributed to Cyrus by some, but in any case must be referred to a period not later than the second century before Christ.

Further history of the Yueh-ti.

Returning from this long digression we take up again the Saka history after the Turushka princes of Kashmír. The title 'Sháh' found on the coins of Basdeo is none other than the 'Sháhan-Sháhi' of the Gupta inscription on the Allahabad pillar and the 'Sáhánu-Sáhi' of the Jaina legend already quoted. It is also the 'Sháh' of the Katur kings of Kábul and the 'Shah-Katur' of the present chiefs of Kashkára. Basdeo is the last of the rulers whose name is found preserved in Greek letters. Returning to the Chinese writers,[2] we find that about 98 A.D., the chief of the Yueh-ti had so far established his power as to aspire to the hand of the daughter of the emperor of China in marriage. Ambassadors were sent to China on his behalf, but were stopped by the Chinese governor of Kashgar, who refused to allow them to proceed. The Yueh-ti king then sent a force of

[1] Borders on Albania.

[2] J. A. S. Paris, VIII., 257; J. A. S. Ben., VI., 61; Examen methodique des faits qui concernent le Thian-tchu ou l'Inde par M. Pauthier: Paris, 1840.

[3] Beal's Fah Hian, p. 197: Klaproth, Tabl. Hist., p. 134.

70,000 men to compel the passage of his envoys, but these returned discomfited and ever afterwards he remained tributary to them. There is little doubt that the vigorous proselytising set on foot by Kanishka and his successors led to much division and dissension amongst his followers and subjects, and their treatment of the local princes and distribution of the government amongst military officials did not tend to make their rule more acceptable. Taking advantage of these disorders the Kritíyas expelled the Turushkas from Kashmír and were in turn driven out by the Tukhara king of Himatala about 260 A.D., but again succeeded in recovering the throne of Kashmír. Up to the early part of the fifth century[1] the Indo-Skythian tribes were known as Skuthæ to the Greeks and Romans and as Turks to the Persians and Arabians, but about 420 A. D., these names give place to the term Haïatelites or Haiateleh amongst the Arabs, Hepthalites amongst the Byzantine historians and Hephthal amongst the Armenians. Other variations are Euthalites, Ephthalites, Nephthalites, Atelites, Abtelites, who are one with the Cidaritæ of Priscus or the 'White Huns.' They were, according to DeGuignes, a race of Huns called Tele and first came into notice in their wars with the Sassanides, and eventually were conquered and absorbed by the Tu-khiu chief Tu-men, the founder of the eastern Turks, in the middle of the sixth century.[2] The Chinese annals also record[3] that at the end of the second century after Christ, the eastern capital of the Yueh-ti lay to the west of the sandy desert of Foe-ty at Lou-kiang-chi, which Klaproth places near Khiva. To the north, the Yueh-ti country was bounded by the territory of the Ju-ju, who appear to be one with the branch of the White Huns, who were subsequently conquered by the Tu-khiu, once their servants and iron-workers. The Yueh-ti had brought a large tract of country under their sway and Po-lo (Bolor or Chitrál) some two hundred and ten leagues from the sands of Foe-ty became their western capital. Some time after their king called Kitolo (Katur) crossed the Hindu Kush (420 A. D.) and invaded Sind and subdued five kingdoms to the north of Kan-to-lo (Gandhára). At this time the Yueh-ti used chariots drawn by two or

[1] Reinaud, J. A. S. Paris, 6th Ser., I., 430: DeGuignes, Hist. des Huns, II, IV., 325. [2] Julien, J. A. S. Paris, 6th Ser, III., 325. [3] Klaproth, Tabl. Hist., p. 99, 134: Rémusat, Nouv. Mél. Asiat., 1, 223: V. de St. Martin, Les Huns blancs, ou Ephthalites, Paris, 1849: Rawlinson's Seventh great Oriental Monarchy, p. 294.

four pair of oxen. During the time of the Goei dynasty (424-451 A. D.) a merchant came from the country of the great Yueh-ti to China and taught the Chinese the art of making coloured glass. The Yueh-ti or Yue-tchi were now called Ye-tha or Yi-ta, and their power extended from Khoten to the Oxus and their principal town was Bamian. Their country was called Ta-koue or the 'great kingdom' by the Chinese. Kitolo left his son at Peshawar, who established there a separate kingdom of the little Yueh-ti, whilst the great Yueh-ti still occupied Kábul. Still there are not wanting traces of the presence of the Huns in this part of the world. Cosmas in 525 A. D. gives the name Hunnie to the country lying between China and the borders of Persia and the Roman Empire. He calls the king of this country Gollas,[1] who had at his disposal two thousand elephants and a numerous cavalry, which show that Gollas must have had possession in some flat country and connections with India. Damodara[2] Gupta records his victory over the fierce army of western Hunas at Maushari in the previously quoted Aphsar inscription, and from DeGuignes we learn that Soupharai or Sukha Rai, the Soucran (Sukha Ram) of Tillemont and Sukhra of the Arabs, who was governor of Zabulistán, Ghazni and Bost under the Sassanidan princes Balas and Kobad, defeated the White Huns at Bikand about 490 A. D. Still we cannot accept the conclusion of Reinaud and others that the Ephthalites were one with the Yueh-ti. We acknowledge the proximity of the Ephthalites in the countries west of the Kábul valley, where, according to Procopius, they had been settled for a long time and some of them sought service as mercenaries in the Persian army, and their chief may have become suzerain of the countries as far as the Indus. But as remarked by Reinaud:—

"On ne mieux comparer les vastes contrées de la Tartarie à cette époque qu'à une mer presque constamment en furie, et où les vagues ne font que changer de place suivant le vent qui souffle"

The Huns had no long lease of power, for by the middle of the sixth century, or twenty-five years after Cosmas' relation, the White Huns fell before the Tukhiu or eastern Turks.

[1] J. A. S. Paris, 6th Ser., I., 433: Gollas must be the same as Anowai, who ascended the throne in 520 A. D. and perished at the hands of Tuman.
[2] *Antea*, p. 425: this battle will fall in 580-600 A. D. if we take 319 A. D. as the initial date of the era, and in 430-450 A. D. if we take 167 A. D. as the initial date, and all indications show that the latter is the more probable date.

Chinese travellers.

The Chinese pilgrims of whom accounts have come down to us in some detail afford us valuable aid in ascertaining who were the occupants of the trans-Indus country at this time. There are, however, certain difficulties connected with the topography of the region traversed by them which throw some doubt on the conclusions arrived at. Fortunately all of them—Fah Hian,[1] Sung Yun,[2] and Hwen Thsang[3]—visited the kingdom of Khie-pan-to bordering on Yárkand. Fah Hian calls it Kie-cha and Sung Yun calls it Han-pan-to. Hwen Thsang on his return journey to China after crossing a mountain range to the south of the valley of Po-mi-lo (Pámír) entered the kingdom of Po-lo-lo celebrated for its gold washings, and after a difficult journey of 500 *li* arrived at Khie-pan-to on the Síta river, where lived a king of the Chína Suryadeva *gotra*, descended from an ancestor born of the sun-god and a Chinese princess: hence the family name. M. de St. Martin identifies the chief city of Khie-pan-to with Kartchu on the Yárkand river. Fah Hian left Kartchu, 'in the midst of the Tsung-ling mountains,' on his journey from China, and proceeding westwards for a month crossed those mountains into northern India. He adhered to the incline of the same mountains for fifteen days in a south-westerly direction and reached the Indus (Sin-to), which he crossed and entered the country of Ou-chang or Swát. Here the river of Gilgit is clearly intended by the name 'Sinto,' for otherwise his statement is unintelligible. Sung Yun left Han-pan-to also on his outward journey from China and going west six days entered on the Tsung-ling mountains and after three days reached the city of Kiueh-yu and after three days more the Puh-ho-i mountains and then the kingdom of Poh-ho, to the south of which lay the great snowy mountains. Thence in the first decade of the 10th month (or two months after leaving Han-pan-to) he arrived in the country of the Ye-tha in 519 A.D. "They receive tribute from all surrounding nations on the south as far as Tieh-lo (To-li of Fah Hian and Tha-li-lo of Hwen Thsang, the modern Dárel); on the north, the entire country of Lae-leh (La-la, or it may be read Chih-leh); eastward to Khoten and west to Persia, more than forty countries in all." He then alludes to the curious custom of the females wearing horns on their heads from

[1] Beal's Fah Hian, p. 14. [2] *Ibid.*, p. 181. [3] Mém., II., 209.

which drapery descended, and adds "these people are of all the four tribes of barbarians the most powerful. The majority of them are unbelievers. Most of them worship false gods." Of the country of Gandhára (Peshawar) he writes:—

"It was formerly called Ye-po-lo. This is the country which the Ye-thas destroyed and afterwards set up Lae-lih to be king over the country: since which events two generations have passed. The disposition of this king was cruel and vindictive and he practised the most barbarous atrocities. He did not believe the law of Buddha, but loved to worship demons. The people of the country belonged entirely to the Brahman caste; they had a great respect for the law of Buddha and loved to read the sacred books, when suddenly this king came into power who was strongly opposed to anything of the sort and entirely self-reliant. Trusting to his own strength he had entered on a war with the country of Ki-pin respecting the boundaries of their kingdom and his troops had already been engaged in it for three years."

Sung-yun attended the royal camp to present his credentials and was very roughly received and when remonstrating with the king said:—"The sovereign of the Ye-tha and also of Ou-chang when they received our credentials did so respectfully." This would clearly show that the king of Gandhára did not belong to the long established section of the Ye-tha, and the Chinese traveller also styles the subjects of the Gandhára king Si-khiang or 'western foreigners.' According to Sung-Yun their conquest of Gandhára took place only two generations previously, or say 470 A.D., and they were in 520 A. D. at war with Kábul. Fah Hian[1] refers to the Yueh-ti conquest of Gandhára as having occurred 'in former times,' and he wrote in 402 A.D., so that this clearly was a different conquest from that mentioned by Sung Yun. Again, the conquest by Kitolo must be considered a third, and the reigning prince of Gandhára in Sung-Yun's time probably belonged to some other division of the little Yueh-ti, who were then at war with the great Yueh-ti at Kábul.[2] Chitrál is moreover said to have belonged to Akeou-khiang in the time of the Goei dynasty (424-451 A.D.), so that we may consider the kingdom of Gandhára

[1] Beal., *l. c.*, p. 37. [2] General Cunningham suggests that the Gújars in Yaghistán and the plains are the representatives of the Kushan or Great Yueh-ti. Yaghistán is the name given to the country inhabited by tribes having independent institutions on our north-west frontier. Captain Trotter notes of these Gújars that they are said to be of Ját descent, though now Musalmáns. They are termed by the Pathâns Hinoki, and are frequently met with in the pastoral districts where they tend the flocks of the Pathâns, who are lords of the soil. "They are said to be descendants of the aboriginal inhabitants of the country." Rep. G. T. S., 1873-75, p. 26. Cunn. Arch. Rep., II., 72.

in 520 A.D., as an independent offshoot of the little Yueh-ti, whose principal seat was in Chitrál. The name Si-khiang is usually given to the Tibetans, and we know that the little Yueh-ti fled to Tibet in the first century before Christ.

Hwen Thsang.

Hwen Thsang on his journey from China visited Tukhara and then Bamian, where the people were zealous Buddhists. Further east in Kapisa in the Kábul valley there was a Kshatriya king (630 A.D.). Lamghán and Nagarahára were subject to Kapisa as well as Purushapura (Peshawar), the capital of Gandhára. This dynasty, however, could not have lasted long, for Al Birúni, as we have seen, distinctly states that the dynasty which preceded the Hindu rulers of Kábul was a Turkish one, and this can be no other than the ruling family of the great Yueh-ti. Buddhism prevailed throughout the whole valley of the Kábul river and in Swát, where the spoken language, though somewhat different, resembled that of India. The remains of numerous buildings existed which had been destroyed by Mihirakula, Raja of Kashmír, about 500 A.D., were seen by the Chinese traveller. Hwen Thsang then advanced as far as the sources of the Swát river and afterwards passed along the Indus into the country of Tha-li-lo (Darel), the former capital of Udyána or Swát. Thence he visited Pol-u-lo,[1] the modern Iskardo, where the people spoke a different language. All these indications corroborate the result of our previous investigations and show that an Indian people speaking an Indian language formed during the first seven centuries of the Christian era the main part of the population along the whole length of the Kábul valley and along the Indus up to Gilgit, where they were bounded by the Baltis on the east. We shall now examine the few notices that occur in Arabian and Persian writers.

Musalmán historians.

The writings of the earliest Musalmán geographers[2] show that Kábul was divided between the dominant Turks and subject Hindus. Istakhri in

[1] There is some difficulty about this name and there are apparently two places that can answer to the name Bolor. According to Klaproth (*Mag. As.*, I., 96), Chitrál was known as Bolor to the Chinese, and he notes that under the Hans it belonged to Ou-tchha (Udyána or Swát) and under the Goei (424-451 A.D.), it was the kingdom of Akeou-khiang, clearly a Tibetan dynasty and perhaps connected with the little Yueh-ti: Cunn. Anc. Geogh., 83, and Progs. R. G. S., III. The Pou-ho of Sung-Yun (Beal, p. 183) would more nearly approach Chitrál, and this will also be the Po-lo of Klaproth's authorities quoted at p. 427.

[2] This paragraph is based upon Elliot, II., 412-427.

915 A.D. writes:—" Kábul has a castle celebrated for its strength, accessible only by one road. In it there are Musalmáns and it has a town in which are infidels from Hind." In this statement he is followed by Ibn Haukul (942 A.D.), and his successors. Ibn Khallikán states that in the time of Yakúb-bin-Lais Kábul was inhabited by a Turkish tribe called Durán, on which Elliot remarks:—" It is possible that the term Durán may have a connection with '*darra*' a hill-pass (valley), and that allusion may be made to the country north of Kábul, just in the same way as in modern times, the inhabitants of these same tracts are styled in Kábul, 'Kohistánis' or hill-men." The first invasion recorded was in the time of Abdullah, Governor of Irák, on the part of the Khalif Usmán (644 A.D.) He invaded Zaranj and Kish then considered part of Indian territory and the tract between Arrukhaj (Arachosia) and Dáwar and in the latter country attacked the idolators in the mountain Zúr. Abdurrahmán subsequently advanced to Kábul about the year 661 A.D. and took prisoner Kábul Sháh, the ruler, who became a convert to Islám; but we learn " that the king of Kábul made an appeal to the warriors of India and the Musalmáns were driven out of Kábul. He recovered all the other conquered countries and advanced as far as Bust, but on the approach of another Musalmán army, he submitted and engaged to pay an annual tribute." In 683-4 the Kábulis refused to pay the annual tribute and their king was taken and killed. The war was continued by the king's successor, who was again compelled to yield submission to the Musalmáns, but " whenever opportunity offered, renewed efforts were made by the Kábulís to recover their lost independence." In 697-8 Ranbil[1] was chief of Kábul and reduced the leader of a Musalmán army who had invaded his territory to such straits that he was compelled to purchase his release. In 700-01 A.D., an avenging expedition under Abdurrahmán was sent by the celebrated Hajjáj against Kábul and was completely successful. The victor on his return was, however, coldly received by his master because he did not remain and take permanent occupation of the country. Exasperated at this, Abdurrahmán made a treaty with the infidels and promised them freedom from tribute should he succeed in overthrowing his master, and on

[1] This name is very variously given by different writers, Zentil, Zenbil, Ratbyl, Ratpíl, and Wilson makes the name Ratnapála.

the other hand the Kábul king agreed to afford him a refuge in the event of failure. Hajjáj was victorious and Abdurrahmán committed suicide when his host was about to deliver him up to the conqueror. Masúdi and other writers make the name Ranbal a dynastic royal title for the prince of Kábul and the territories between Hirát and Kábul. When Al Mamún was made governor of Khurásán he captured Kábul and obliged the king to become a Muhammadan. In 869-70 A.D., Yakúb-bin-Lais took Kábul and made its prince a prisoner. The king of Ar-Rukhaj was put to death and its inhabitants were forced to embrace Islám. This conquest appears to have been more durable than any of the preceding ones, for we find the coins of Yakúb struck at Panjshír, to the north-east of Kábul in the years 874-75 A.D.

Indians of Kábul.

All the authorities quoted by Elliot, except Al Birúni, makes Kanak the last of the Katormán kings.

Al Birúni writes:[1]—

"Le Kaboul était autrefois gouverné par des princes de race turque; on dit qu'ils étaient originaires du Tibet. Le premier d'entre eux, qui se nommait Barhtigín.** le trône resta au pouvoir de ses enfants pendant à peu près soixante generations.** l'ordre de ces règnes était écrit sur une étoffe de soie qui fut trouvée dans la forteresse de Nagarkot: j'aurais vivement désiré pouvoir lire cet écrit: mais différentes circonstances m'en empêchèrent. Au nombre de ces rois fut Kank; c'est celui qui a fondé le vihâra de Peychaver et dont le vihâra porte le nom. * * le dernier roi de cette dynastie fut Laktouzeman. Le prince avait pour vizir un brahmane nommé Kalar.** Il s'empara donc du trône et eut pour successeur le brahme Sámanda. Celui-ci fut remplacé par Kamalavâ; puis vinrent successivement Bhima, Jayapála, Anandapála et Nardajanpála. Celui-ci monta, dit-on, sur la trône l'an 412 de l'hégire (1021 A. D.) Son fils Bhimapála lui succéda au bout de cinq ans."

Kank can be no other than the Kanishka of the Turushka dynasty of Kashmír. Elliot identifies Kalar with the Syálapati of the bull-and-horseman type of coins found in the Kábul valley and which bear Brahmanical emblems as those of their predecessors, bore the elephant and lion, considered Buddhistic signs. The latter in turn differed from the earlier Indo-Skythian coins. We cannot further allude to the interesting results derivable from a study of these coins beyond that they show that the Turkish dynasty had

[1] Fragments Arabes, p. 147; Dowson's Elliot, II., 10. [2] See Thomas' Prinsep, I., 330, and references.

become thoroughly Indianised. In 961 A.D. Alptegín established the Musalmán dynasty of Ghazni and henceforth the Hindus were the objects of bitter persecution, so that many became Musalmáns and others fled to the hills or to India. In the histories mention is made of the services rendered to Mahmúd of Ghazni by the Hindu renegade Tilak, who is also said[1] to have brought "all the Hindu Kators and many outsiders" under the rule of Sultán Masúd (1032 A.D.) At the time of Tímúr's expedition[2] against these Kators (1408 A.D.) their country extended from the frontiers of Kashmír to the mountains of Kábul and they possessed many towns and villages. One of their large cities was called Shekal and another Jorkal, which latter was the residence of the ruler. Tímúr approached the Kator country by the Kháwak pass from Indaráb; to his right lay the Kators and to the left the pagan Siyáh-Poshes. He describes the former as a people who drink wine and eat swine's flesh and who speak a language distinct from Turki, Persian, Hindi and Kashmíri, and their chiefs were called Uda and Udáshu or Adálshu. Tímúr further adds that most of the inhabitants were idolaters; they were men of a powerful frame and light complexion and were armed with arrows, swords and slings. In the time of Baber the country of Kábul was occupied by many and various tribes. He writes[3]:—

"Its valleys and plains are inhabited by Túrks, Aimáks and Arabs. In the city, and the greater part of the villages, the population consists of Tájiks. Many others of the villages and districts are occupied by Pashái, Paráchis, Tájiks, Berekis and Afgháns. In the hill-country to the west reside the Hazáras and Nukderis. Among the Hazára and Nukderi tribes are some who speak the Mughal language. In the hills to the north-east lies Káfiristán and such countries as Kator and Gebrek. To the south is Afghánistán. There are eleven or twelve different languages spoken in Kábul; Arabic, Persian, Túrki, Mughali, Hindi, Afgháni, Pashái, Paráchi, Geberi, Bereki and Lamghání."

The Parácha Musalmáns of the Indus valley appear to represent the Baniyas of the plains and have a dialect of their own. Pashu is spoken in the valley of the Kunar river and Hindi will probably represent the language of the Káfirs and people of Kashkára. In the reign of Jahángír (1619) the Sarkár of Paklí is described as bounded on the north by the Kator country, on the south by the Ghakkar country, on the east by the Kashmír mountains

[1] Dowson's Elliot, II., 128, 130. [2] *Ibid.*, III., 400. [3] Erskine's Baber, I., 221.

and on the west by Attak-Banáras. Paklí was traversed by Jahángír on his way to Kashmír and lay between the Indus and the Kishanganga. At this time, the country to the north was known as Kator comprising Gilgit, Darel and Chitrál.

Modern inhabitants.

From the preceding extracts we gather that Katúra or Kator was the name given to the reigning family in Kábul for many generations, and that they were so Indianised as to be regarded as Hindus. They, moreover, ruled over an Indian race inhabiting the country throughout the highlands from Lamghán to Baltí. We shall now turn to the people inhabiting this region at the present day. We find three great groups of tribes in this tract, the Kho division between the Indus and the Hindu-kush, the Shins on the upper Indus and surrounding all, Muhammadans of different races speaking Pushtu or Persian or Túrki. The Khos comprise the mass of the Chitrál population, the Siyáh-Posh of Káfiristán and the people of Lamghán and represent the Khosas or Khasas of whom we have heard so much. The upper part of the Kashkára valley is called Túri-kho, the middle is known as Múl-kho and the lower as Lud-kho and the language spoken is called Khawár, the Arniya of Dr. Leitner. These Khos are the oldest inhabitants and are styled '*Fakír-mushkin*' by the ruling class. The latter are descended from the common ancestor of the governing family and are generally spoken of as Sáh Sangallie, next to whom come the Zundre or Ronos and then the Ashimadek or food-givers. As already mentioned the Khushwaktiya branch of the Katúres reigns in Yassan and the Sáh or Sháh Katúre branch in Chitrál. It would appear that the native rulers of Gilgit, Iskardo and Kashmír were supplanted by Musalmán adventurers in the fourteenth century and those of Kashkára by others in the sixteenth century. The local tradition in Chitrál is that it was governed by 'a Rais who is said to have been of the same family as the rulers of Gilgit before the introduction of Muhammadanism.' The last local ruler of Gilgit was the Ra Sri Buddhadatta of the Sáh-rais family and the old name of that valley was Sárgin. There is little doubt that in the name Sáhrais we have the Sáh or Sháh of Sáh Katúre and a continuation to our own day of the 'Sháh' in the inscriptions of Vásudeva and the Sáhánu-Sáh of inscriptions and legends. The members of the present ruling family

are intruders and it is to the Ronos we must look for the representative of the old princes. Major Biddulph[1] tells us that :—

"The Ronos rank next to the ruling family in every country in which they are found. The Wazírs are generally though not always chosen from amongst the Rono families. They exist in small numbers in Nagar, Gilgit and Punyál, gradually increasing in numbers as one travels westwards through Yassan, Mastúj and Chitrál, in which places there are said to be altogether over 300 families. In Nagar and Yassan they call themselves Hara and Haraiyo and in Chitrál, Zundra, but they all claim to be of the same stock. Some exist in Wakhán and Sirikol, where they are called Khaibar-khatar, and in Shighnan, where they are called Gaibalik-khatar."

The Sáh Sangallie class in Chitrál give their daughters to the Ronos, 'who being descended from a former dynasty of rulers of the country are regarded as of royal blood.' Surely in these we have the representatives of the Yueh-ti rulers of Kashmír who called themselves '*Korano*' on their coins, and of the Kator kings of Kábul, the last of whom was displaced by his Brahman minister; whilst the actual *de-facto* ruler of Kash-kára retains the ancient title of 'Sáh Katúre.'

Recent travellers.

From Major Biddulph[2] we learn that "the name 'Dárd' is not acknowledged by any section of the tribes to whom it has been so sweepingly applied. In a single instance the term is applied by one tribe to some of their neighbour." The correct name for the principal tribe inhabiting Gilgit, Astor and the Indus valley is Shin or Shing, possibly the Chinas of the Puránas. They have pleasing features, hair usually black, but sometimes brown, complexion moderately fair: the shade being sometimes light enough, but not always, to allow the red to shine through; eyes brown or hazel and voice rough and harsh. Mr. Drew gives the divisions which exist at the present day and which he says 'may be called castes, since they are kept up by rules more or less stringent against the intermarriage of those who belong to different divisions.' With both Kho and Shin are found Gujars, Kremins and Doms. The last is a servile caste corresponding to the Khasiya Doms in Kumaon and performing similar duties. The habits and customs of both Khos and Shins and the language spoken by them all show their Indian origin, though they have been

[1] 'Tribes of the Hindu-koosh,' p. 34, 66. [2] *Ibid.*, p. 8, 156.

for some centuries converts to Islám. There is still one other considerable section of the inhabitants of this region to be mentioned. Their language betrays a Turanian origin and they call themselves Búrisho or Wúrshik and are known to their neighbours as Yeshkun. They form the entire population of Hanza, Nagar and Punyál, and nearly all the population of Yassan besides being numerically superior in Gilgit, Sai, Darel and Astor, and their language is called by themselves Búrishki and by others Khajúna. Major Biddulph[1] rightly, we think, connects the name 'Búrisha' with 'Purusha-pura,' the name of the capital of the Little Yueh-ti in the fifth century of our era.[2]

The Moollah who visited Chitrál in 1874 saw three several pagan Káfirs from various parts of Káfiristán and describes their appearance as so like the Chitrális both in features and dress and in the way of arranging the hair of their faces that it would be imposible to distinguish them apart were it not for the fact that the Káfirs all wear a tuft of hair on the crown of the head like the Hindús, and this, too, is only visible when they remove their headdress.[3] In 1841, Dr. Griffiths saw some of the Káfir inhabitants of Kattar and describes them as a fine-bodied people and very active and not very fair. The chiefs were much fairer than their followers and in the expression of face and eyes, Aryan. According to Major Biddulph, the Siyáh-Posh are separable into three tribes conformable to the natural divisions of the country, the Rum, Wai and Bush. The Rum-galis or Lum-galis border on Laghmán and Kábul and may probably be referred to the Romakas of the Puránas. The Wai-galis inhabit the valleys extending south-east to the Kunar river at Chaghán Saráí, and the Bush-galis occupy the valleys to the north. They speak a language having an Indian basis; their principal deities are Imbra (Indra) and Mani (Manu), and the men shave their heads in Indian fashion, merely leaving the ordinary top-knot. The women of the Bash-galis wear a curious head-dress consisting of a sort of black cap with lappets and two horns about a foot long made of wood wrapped round with cloth and fixed to the cap. This custom is noticed by Hwui Seng[4] when writing of the Ye-tha country which was met

[1] *l. c.* p. 38, 160. [2] *Antea*, p. 428. [3] Trotter's Report, 1873-75, p. 25.
[4] Beal's Fah-Hian, p. 185 : about 520 A.D.

with on leaving Poh-ho : there the royal ladies wore 'on their heads a horn in length eight feet and more, three feet of its length being red coral. As for the rest of the great ladies they all, in like manner, cover their heads, using horns, from which hang down veils all round like precious canopies. * * The majority of them are unbelievers and most of them worship false gods.' Hwen Thsang has[1] a similar notice regarding the Tukhára country of Himatala, the ruler of which was so friendly to the Yueh-ti Turushkas of Kashmír as to avenge their downfall.[2]

Conclusions.

Taking into consideration the very different influences to which the Khos of Kashkára and the Khasiyas of Kumaon have been subjected for many centuries, it is not curious that their habits and customs at the present day should widely differ. The fortunes, too, of their rulers have varied. Syálkot in the Panjab is supposed to have been founded by Sáliváhan, whose son Rásálu was succeeded by Raja Hudi, chief of the Syálas.[3] The chiefs of Nagarkot or Kangra were also closely connected with the Yueh-tis and Al Birúni mentions that they possessed a genealogical tree of the Turkish rulers of Kábul written on silk.[4] The chiefs of Lohara or Sáhi, a petty hill

[1] Mém. II., 197. [2] *Antea*, p. 427. The following references will furnish all the information known about these so-called 'Káfirs' :—

Elphinstone, M.—Account of the kingdom of Cabul, II., 375-387 : London, 1842.

Burnes, A.—Travels into Bukhara, II., 240; London, 1834. J. A. S. Ben., II., 305 : VII., 325 : Cabool, p. 206, 218, 281.

Vigne, G. T.—Personal narrative of a visit to Guzni, Kábul and Afghanistan, p. 234 : London, 1840.

Masson, C.—Narrative of various journeys in Balochistan, Afghanistan and the Panjab, I., 192 : London, 1842.

Wood, J.—Narrative of a journey to the source of the river Oxus in 1836-38, p. 295: London, 1841.

Mohan Lal.—Siah-posh tribe. J. A S. Ben , II., 305.

Raverty, H. G.—Language of the Siah-posh Káfirs, J. A. S. Ben., XXIII., 269; and Notes on Káfiristan, *Ibid*, XXVIII., 317.

Trumpp, Dr.—Language of so-called Káfirs, J. R. A. S., XIX., 1.

Tanner, Col.—H. Proc. R. G. S., III., 278, 311, 498.

Biddulph, Major.—Tribes of the Hindu Koosh, p. 126: Calcutta, 1881.

Prinsep, J., I., 214, Thomas' edition

Erskine, W.—History of Baber, I., 221.

Trotter, Capt.—Report G. T. Survey, 1873-75, p. 33 : *Ibid.*, 1876.

Elliott, H.—Dowson's edition, III., 401, 407, 481.

Reinaud, M.—Fragments Arabes et Persanes, p. 135. Mém. Sur l'Inde, p. 70-83, 179.

Rémusat, A.—Nouveaux Melanges Asiatiques, I, 223.

Out of all these writers only Elphinstone, Masson, Burnes, Trumpp and Biddulph have seen Káfirs and no European has as yet entered their country.

[3] Cunn. Arch. Rep., II., 21 : J. A. S. Ben., XXIII., 80. [4] Cunn. Arch. Rep. V., 155 ; *antea*, p. 433.

state of the Gilgit or Sárgin valley, who succeeded Didda on the throne of Kashmír in the eleventh century, also claimed descent from Sáliváhana, but were none the less Sáhis of the Turushka stock.[1] In A.D. 700, both the king of the Turks and the king of Kábul are said to have borne the same name, which was also common to the kings of Kashmír.[2] Unfortunately this name comes to us in many guises, but if we accept the form Ranbil as standing for Ratnapála we have another link in the chain. Again the existence of a Surya-deva Raja, sprung from the sun-god, and therefore of the solar-race, in the hill state[3] of Khie-pan-to (Sirikol) in the seventh century, shows the influence of Indian ideas far beyond the limits assigned ordinarily to the Indians themselves. We may now conclude that we have carefully and fairly made out a connection between the dynasty ruling west of the Indus known as Katúres and the Kumaon Katyúras and between the people of Kumaon and the Kunets of Kunaor and the Khos of Kashkára. We find, wherever the Khasas occur, the Doms live with them as their servitors and recognize in these Doms the descendants of the Dasas of the Vedas, inhabitants of Upper India even before either Nágas or Khasas appeared. The time has passed for attributing to the small immigration of the Aryans that has given us the Vedas, the origin of all the races who are to-day assumed to be of Aryan blood and even for holding that all so-called Rajpúts are of Aryan descent. Many of our Rajpút clans can be traced back to Baktrians, Parthians and Skythians when the facts now fast accumulating are closely examined. We have seen already how the Aryan writers themselves acknowledge that in many cases all the castes have a common origin. Many of the purer race did not accept the advanced ideas of their priest-led brethren and are accordingly contemptuously classed amongst the outcasts because 'they knew no Brahmans.' The Aryan immigrants themselves found on their arrival in India that other members of their race had preceded them. These from admixture with the so-called aborigines had degenerated from the primitive type in customs and perhaps also in features. Their religion also was affected by this union for, as we shall see hereafter, the Pasupati cult had its origin amongst the non-Brahmanical tribes, and from this sprang the

[1] Troyer's R. T., VI., 367: VII., 1283. [2] Cunn. Arch. Rep., II., 74.
[3] Mém. I.

terrible forms of Siva which have taken such hold in comparatively modern times of the popular religious thought of India. The influence of the Vaidik Aryans is better shown in the language and literature of modern India and the modifications of the physical characteristics of the various tribes with which they have come in contact. Professor Huxley, as quoted by a recent writer, says, "the Indo-Aryans have been in the main absorbed into the pre-existing population, leaving as evidence of their immigration an extensive modification of the physical characters of the population, a language and a literature."

We may, therefore, assume for the Khasiyas an Aryan descent in the widest sense of that term much modified by local influences, but whether they are to be attributed to the Vaidik immigration itself or to an earlier or later movement of tribes having a similar origin, there is little to show. It is probable, however, that they belong to a nation which has left its name in various parts of the Himálaya, and that they are one in origin with the tribes of the western Himálaya whom we have noticed. This nation in course of time and chiefly from political causes and the intrusion of other tribes was broken up into a number of separate peoples, some of whom have become Muhammadans, others Buddhists and others again, as in these hills where the facility of communication with the plains and the existence of the sacred shrines in their midst rendered the people peculiarly open to Brahmanical influence, became Hindús in religion, customs and speech. As we approach the Aryan ethnical frontier in the Himálaya to the west, Turks, Tátars, Iranians, and Aryans professing the three great religions meet and as we near the ethnical frontier in the east, Tibetans and Hindús are found together in the debateable ground, as we may call Nepál. Further east Tibetans alone prevail until we get to the shading off between them and the monosyllable-tongued Indo-Chinese tribes in farthest Asám. Whatever may have been their origin, the Khasiyas have forgotten it and influenced by modern fashion have sought to identify themselves with the dominant Hindu races as the Hindu converted to Islám and called Shaikh seeks to be known as a Sayyid when he becomes well-to-do in the world. In this respect the Khasiyas do not differ from any other hill tribe brought

Khos and Khasas are sprung from one race.

under Brahmanical influence. All see that honour, wealth and power are the hereditary dues of the castes officially established by the authors of the Mánava Dharma-sástras and seek to connect themselves with some higher than their own. Even at the present day, the close observer may see the working of those laws which have in the course of centuries transmuted a so-called aboriginal hill-race into good Hindús. A prosperous Kumáon Dom stone-mason can command a wife from the lower Rajpút Khasiyas, and a successful Khasiya can buy a wife from a descendant of a family of pure plains' pedigree. Year by year the people are becoming more orthodox in their religious observances and the fanes of the *dii minores* are becoming somewhat neglected. What little historical records exist show us great waves of invasion and conquest over all Upper India from the earliest times and bitter dynastic and religious struggles. The many different tribes who joined in these wars have not been superimposed without disturbance one on the other like deposits of inorganic matter, so as to enable us like the geologist at once to declare the order of their coming from their ascertained position, but rather they are in the position of a range of mountains full of faults, inversions and folds. Following out this simile the earliest inhabitants had to receive conqueror after conqueror, and accommodate themselves to the deposit left behind, by being crumpled up so as to occupy less space or by being cracked across so as to allow some parts to be pushed above others. We find that this is what must have taken place. In some cases the intruding power was strong enough to absorb or to enslave the conquered race, in other cases these have been pushed onwards from their original seats, and again in other cases they have been divided into two. From Tibet on the north and the plains on the south intruders have wedged themselves in or been superimposed on the Khasiya race, chemically assimilating as it were the subject race in places by intermarriage and in others showing a purely mechanical admixture. For these reasons it is impossible to trace any unbroken direct connection between the Katúres and Khos of Kashkára and the Katyúras and Khasas of Kumaon, but the affinity is none the less established on as good grounds as any other question connected with early Indian history and may be accepted until other and better evidence comes to light.

CHAPTER V.

HISTORY—(*contd.*).

CONTENTS.

Early history from local sources. Garhwál Rajas. Hwen Thsang. Brahmapura. Tradition regarding Lakhanpur. The golden land. The colonisation of Juhár. The Amazonian kingdom. Tibet from Chinese sources. Govisana. Annihilation of Buddhism. Sankara Acharya. Sankara in Nepál. Katyúris or Katyúras. Kárttikeyapura. Inscriptions. Pandukeswar plates. Second series of Rajas. Facsimile of one of the plates. The Kumaon and Pála plates. Localities. Countries conquered. Bhágalpur plate. Tibetan records. Sárnáth inscription. Pála dates. Decline of the Katyúrís.

Early history from local sources.

In the tract stretching along the foot of the hills from the Sárda to the Ganges and thence through the Dún to the Jumna we have traces of an ancient civilisation all record of which has vanished. In the Tarái in the depth of what appears to be primeval forest are found solidly-built temples containing stones richly carved and ornamented and surrounded by ancient plantations of mango and other fruit trees. The modern town of Rámnagar has been built from materials derived from the ruins at Dhikuli, a little higher up on the right bank of the Kosi river and which once, it is said, under the name of Vairát-pátan or Virátnagar,[1] was the capital of a Pándava kingdom subordinate to that of Indraprastha long before the name Katyúri was heard of. The numerous remains of tanks and scattered buildings are also attributed in popular tradition to the '*Pandub log.*' Further west at Pánduwála near the Láldháng chauki are the remains of an ancient town and temples of which many of the finer carvings have been taken away to Gwalior and Jaipur. At Lúni Sot also we have some fine stone-work and eight miles to the west near the ruined village of Mandhal in the Chándi Pahár some six miles east of Hardwár are the remains of an old temple containing some

[1] This must not be confounded with the Bairát in which the Pándavas resided during their exile, although the Kumaonis have transferred the whole epic to their own hills, making the Lohughát valley the site of Kurukshetra: for the true Bairát, see Arch. Rep., II., 246, and VI., 91.

good carvings in a high state of preservation.[1] They represent both Buddhist and Brahmanical subjects: amongst the former the tree and deer found on the coins of Krananda that have been discovered at Bahat in the Saháranpur district and amongst the latter the bull of Siva and the image of Ganesha. There is also a representation of the Trimúrtti or triune combination of Brahma, Vishnu and Siva which seems to be common amongst these monuments and which doubtless belongs to the later development of Hinduism. Numerous mango groves and the remains of tanks are also found amid the forest along the foot of the inner range in the Dún, similar in all respects to those found in the Tarái. If to these material evidences of an early civilisation we add the testimony of local tradition and those scraps of general tradition floating amidst the stories recorded by the early historians, we may safely assert that at a very early period the country along the foot of the hills supported a considerable population living in towns, the remains of which show a fair advance in the arts of civilisation. Amongst the general traditions regarding these hills we have seen that the legend connecting the Saka king and founder of the Saka era with Kumaon has no support from established facts. The local collections of legends regarding the places of pilgrimage in Kumáon and Garhwál afford us no aid for their political history. All the information before us would lead us to conclude that the name 'Kumaon' cannot have attained to any significance before the fifteenth century. Indeed it was not until the reign of Rudra Chand, in the time of Akbar, that much was known to the Musalmán historians concerning these hills, and it is in the writings of the Musalmán historians of that period that we find the name first applied to the hill country now known as Kumaon and Garhwál and that the stories regarding its early importance first find currency. Whatever historical truth these stories contain must be connected with western Kumaon and Garhwál, both of which can boast of a fairly ascertained history far exceeding in antiquity anything that can be assigned to the tract which apparently originally received the name Kumaon.

[1] See General Cunningham's notes on the ruins of Moradhvaja's fort six miles north-east of Najíbabad, containing Buddhist remains, and on those called Chatarbhúj in the very heart of the Tarái midway between Rampur and Naini Tál and about six miles to the east of the high road. The ruins lie to the east of the villages of Maholi and Dalpur and between the Jonár Nadi and the Kakrola Nadi and extend over several miles. The remains of a fort, tank and wells are visible. Arch. Rep., II., 238. See also J. A. S. Ben., XXXVI., i., 154.

Raja of Garhwál.

Our first step, therefore, is to ascertain what is known concerning the early history of Garhwál and western Kumaon, and for this purpose, however dry the task may be, we must collate and compare the lists of the rulers of Garhwál, for beyond these bare lists we have no written records whatsoever relating to its history. One of the earliest of these lists is that obtained by Captain Hardwicke in 1796 through Pradhuman Sáh, then reigning at Srinagar and published by him in his '*Narrative of a Journey to Srinagar*,' in the first volume of the *Asiatic Researches* :—

1.—*Hardwicke's list of Garhwál Rajas.*

Names.	Number reigned.	Names.	Number reigned.	Names.	Number reigned.
1. Bogh-Dhunt, the first Raja, between whose reign and Adey Paal 900 years passed, of which no records exist,	900	22. Sooret Singh ...	72	48. Aunund Narain ...	42
		23. Mahah „ ...	75	49. Herry „ ...	45
		24. Anoop „ ..	59	50. Mahah „ ...	33
		25. Pertaub „ ...	29	51. Renjeet „ ...	31
		26. Hurree „ ...	39	52. Raamroo ..	33
2. Adey Paal ...	50	27. Jaggen Naat ...	55	53. Chirsturoo ..	49
		28. Byjee „ ..	65	54. Jeggeroo ..	42
3. His son Bejey Paal ...	60	29. Gookul „ ...	54	55. Herroo ...	32
4. Laak Paal ..	55	30. Raam „ ...	75	56. Futteh Sah ..	39
5. Dehrm „ ...	65	31. Goopee „ ..	82	57. Dooleb „ ...	50
6. Kerrem „ ...	70	32. Lechme „ ...	69	58. Purteet „ ...	35
7. Narain Deo ...	72	33. Preeim „ ...	71	9. Lallet „ ...	40
8. Hurr „ ...	45	34 Saada Nand ...	65	Who died in 1781 and left four sons, was succeeded by the eldest,	
9. Govin „ ...	49	35. Perma „ .	62		
10. Ram „ ...	51	36. Maha „ ...	63		
11. Runjeet „ ...	53	37. Sooka „ ...	61		
12. Inder Sain ...	35	38. Subu Chand ..	59	60. Jakert Sah, and was succeeded by his brother the present Rajah ...	2½
13. Chunder „ ...	39	39. Tarra „ ...	44		
14. Mungul „ ..	32	40. Maha „ .	52		
15. Choora Mun ...	29	41 Goolab „ ..	41		
16. Chinta „ ...	33	42. Ram Narain .	59	61. Purdoo Maan Sah.	
17. Pooren „ ..	27	43. Gobind „ ...	35		
18. Birk-e-Baan ...	79	44. Lechmen „ ...	37		
19. Bir „ ...	81	45. Jegget „ ...	32		
20. Soorey „ .	79	46. Mataub „ ...	25	Total of years ..	3774½
21. Kerreg Singh ..	60	47. Sheetaub „ ...	37		

The second list is taken from an official report of the year 1849 and is the same as that accepted by Mr. Beckett, the settlement officer

in an old report on Garhwál. It gives several details which are not found in the other lists :—

2.—*Beckett's list of Rajas of Garhwál.*

Number.	Names.	Reign.	Age at death.	Year of death. San.	Number.	Names.	Reign.	Age of death.	Year of death. San.
1	Kanak Pál ...	11	51	756	28	Lakhan Deo ...	23	32	1277
2	Syám Pál ...	26	60	782	29	Ananta Pál II. ...	21	29	1298
3	Padu Pál ...	31	45	813	30	Purab Deo ...	19	33	1317
4	Abigat Pál ...	25	31	838	31	Abhaya Deo ...	7	21	1324
5	Sigal Pál ...	20	24	858	32	Jairám Deo ...	23	24	1347
6	Ratna Pál ...	49	68	907	33	Asal Deo ...	9	21	1356
7	Sáli Pál ...	8	17	915	34	Jagat Pál ...	12	19	1368
8	Bidhi Pál ...	20	20	935	35	Jit Pál ...	19	24	1387
9	Madan Pál I. ...	17	22	952	36	Ananda Pál II. ...	28	41	1415
10	Bhagti Pál ...	25	31	977	37	Ajai Pál ...	31	59	1446
11	Jaichand Pál ...	29	36	1006	38	Kalyán Sáh ...	9	40	1455
12	Prithi Pál ...	24	40	1030	39	Sundar Pál ...	15	35	1470
13	Madan Pál II. ...	22	30	1052	40	Hansdeo Pál ...	13	24	1483
14	Agasti Pál ...	20	31	1072	41	Bijai Pál ...	11	21	1494
15	Surati Pál ...	22	36	1094	42	Sahaj Pál ...	36	45	1530
16	Jayat Singh Pál ...	19	30	1113	43	Balabhadra Sáh ...	25	41	1555
17	Ananta Pál I. ...	16	24	1129	44	Mán Sah ...	20	29	1575
18	Ananda Pál I. ...	12	20	1141	45	Syám Sáh ...	9	31	1584
19	Vibhog Pál ...	18	22	1159	46	Mahípat Sáh ...	25	65	1609
20	Subhajan Pal ...	14	20	1173	47	Prithi Sáh ...	62	70	1671
21	Vikrama Pál ...	15	24	1188	48	Medini Sáh ...	46	62	1717
22	Vichitra Pál ...	10	23	1198	49	Fateh Sáh ...	48	51	1765
23	Hansa Pál ...	11	20	1209	50	Upendra Sáh ...	1	22	1766
24	Son Pál ...	7	19	1216	51	Pradipt Sáh ...	63	70	1829
25	Kádil Pál ...	5	21	1221	52	Lalipat Sáh ...	8	30	1837
26	Kámdeo Pál ...	15	24	1236	53	Jaikarat Sáh ...	6	23	1846
27	Salakhan deo ...	18	30	1254	54	Pradhaman Sáh ...	18	29	1861

The compiler of this list makes Kanak Pál come from Gujrát and the seventeenth had his head-quarters at Maluwa-kot, the twenty-first at Ambúwa-kot and the twenty-fourth in the Bhilang valley. Numerous Khasiya rajas owed allegiance to Son Pál, who held sovereign sway over all western Garhwál and commanded the pilgrim route to Gangotri. A cadet of the Panwár house of Dháranagar came on a pilgrimage to the holy places in the hills and visited Son Pál on his way. The latter had no son and was so pleased with the young prince that he gave him his daughter in marriage and part of parganah Chandpur as dowry. The Dháranagar prince appears to be the Kádil Pál of this list (25), and it was his descendant Ajai Pál who first attempted the conquest of Garhwál and, according to this list, founded Srinagar. The story of the Panwár prince

resembles in many respects the tradition regarding Som Chand in Kumaon, mentioned hereafter. A third list is given by Mr. Williams and differs in some respect from Mr. Beckett's list:—

3.—*Williams' list of Garhwál Rajas.*[1]

1. Kunk Pál.	17. Sooruj Pál.	33. Jitang Pál.
2. Bisheshwar Pál.	18. Jeyut Pál.	34. Kalyan Pái.
3. Sumát Pál.	19. Aneerudo Pál.	35. Ajay Pái.
4. Poorun Pál.	20. Vibhog Pál, II.	36. Anant Pál.
5. Ameegut Pál.	21. Gugyan Pál.	37. Sundar Pal.
6. Shuktee Pál.	22. Vikram Pál.	38. Sehj Pál.
7. Retee Pál.	23. Vichitra Pál.	39. Vijey Pál.
8. Sáliváhan Pál.	24. Hans Pál.	40. Bahádur Pál.
9. Mudun Pál.	25. Suvarn Pal.	41. Sital Sahai.
10. Bidhee Pál.	26. Kauteekripá Pál.	42. Man Sáh.
11. Bhugdat Pál.	27. Kamdeo Pál.	43. Sám Sáh.
12. Vibhog Pál.	28. Sulukshun Deo.	44. Mahipati Sáh.
13. Jeychander Pál.	29. Mahalukshun Deo.	45. Prithvi Sáh.
14. Heerut Pál.	30. Sut Pál.	46. Medini Sáh.
15. Mudun Suháee.	31. Apoorub Deo.	47. Fateh Sáh.
16. Abeegut Pál.	32. Jey Deo.	

The fourth list was obtained by me through an Almora Pandit and may be called the Almora list:—

4.—*Almora list of Gavhwal Rajas.*

1. Bhagwán Pála.	24. Vikrama Pál.	48. Sahaja Pála.
2. Abhaya „	25. Vijaya „ I.	49. Vijaya „ II.
3. Bisesha „	26. Hansa „	50. Balbhadra Sáh.
4. Karna „	27. Sona Pál, 1209 A.D.	51. Sítala „
5. Kshema „	28. Kánha Pál.	52. Mán Sáh, 1547 A.D.
6. Vyakta „	29. Sandhi „	53. Sáma „
7. Suratha „	30. Sulakshana „	54. Dulorám Sáh, 1580 A.D.
8. Jayati „	31. Lakshanadeva „	55. Garbhabhanjan Mahípati Sáh, 1625 A.D.
9. Púrna „	32. Alakshanadeva „	56. Prithi or Prithvi Sáh, 1640 and 1660.
10. Avyakta „	33. Ananta „	57. Medini Sáh.
11. Sáliváhan „	34. Abhideva „	58. Fateh or Fateh pat. Sáh, 1684-1716
12. Sangita „	35. Abhayadeva „	59. Upendra[2] Sáh, 1717.
13. Mangita „	36. Ajaya „	60. Pradípt „ 1717-72.
14. Ratna „	37. Ajayadeva „	61. Lalat or Lalita Sáh, 1773-80.
15. Malana Pál I.	38. Asápratápa „	62. Pradhuman[3] „ 1785-1804.
16. Vidhi Pál.	39. Jayadeva Pála.	63. Sudarshan „ 1815.
17. Bhagadatta Pál.	40. Ganitadeva „	64. Bhawáni „
18. Jaychandra „	41. Jitárthadeva „	
19. Kirthi „	42 Kalyána „	
20. Madana „ II.	43. Ana „	
21. Anibuddha Pál.	45. Dípánta „	
22. Vibhogita „	46. Priyanihára, „	
23. Subadhán Kot.	47. Sundara „	

The sixty-fifth in descent was Pratáp Sáh, whose son now rules in Tihri or native Garhwál. The dates given are those that have been gathered from grants now existing in the local

[1] Memoir of Dehra Dún, 81. He notes:—"It should be borne in mind that the writer's list does not profess like Hardwicke's to give a lineal succession of kings; each name is only supposed to represent the power paramount in the country for the time being." The grounds for this statement are not given.

[2] Dhalip reigned during a part of the year 1717.

[3] Jayakrit Sáh reigned from 1760 to 1785.

official records. All accounts concur in stating that Ajaya Pál was the first who attempted to reduce the independent Khasiya rajas under his sway, and, as we shall show hereafter, he cannot be placed earlier than 1258-70 A D. The above are the very few dates that we have been able to establish by corroborative evidence, and though every possible source has been carefully examined no better result has been obtained. Taking the twenty-six reigns before Sona Pála and allowing them the long average of fifteen years to each reign, we cannot place the Bhagwán Pála of the fourth list earlier than the first quarter of the ninth century. But then it can be urged that these lists as they stand do not give the entire succession, but only such members of the dynasty as made themselves remarkable, a not unusual feature in Indian genealogical lists. Al-Bírúni, writing in the eleventh century, remarks :—"Les Indiens attachent peu d'importance á l'ordre des faits; ils negligent de rédiger la chronique des règnes de leurs rois. Quand ils sont embarrassés, ils parlent au hasard." The earlier names, too, differ so considerably in these and other lists which have been consulted that no other theory is possible to account for such contradictions as the existence of Kanak Pála at the head of one and Bhagwán Pála at the head of another. By adopting this explanation there is no necessity for placing the reign of Bhagwán Pála in the ninth century. Setting aside Hardwicke's list, an examination of the remainder shows a remarkable agreement in certain noteworthy names. No. 2 has fifth in descent Sigal Pála, who is the Shakti Pála of No.3 and apparently the Suratha Pála of No. 4. The Sáli Pála of No. 2 is the same as the Sáliváhan Pála of No. 3 and No. 4. If we turn to the pedigrees of the Doti and Askot families given hereafter and which are of undoubted local origin, we find a remarkable coincidence amongst the earlier names. The first two of the Doti list are Sáliváhana-deva and Shaktiváhana-deva, and the first on the Askot list is Sáliváhana-deva followed by a Saka-deva as sixth and afterwards by a Vikramáditya and a Bhoja. All that we may suggest regarding the occurrence of the latter names in the lists is that the lists correctly give the sequence of these celebrated names, first a Saka Sáliváhan, then a Vikramáditya and then a Bhoja. These names have apparently been interpolated by the later editors of the lists, the bards of the houses of Garhwál, Doti

and Askot to lend lustre to the ancestry of their patrons, and certainly need not be accepted as members of the family in the regular succession. Even granting that these names are interpolations, there is much deserving of notice in the minor names of the list. The word 'Sigal' in Sigal Pála recals the name of Sigal, the chief city of the Saka-Skythian district of Sakastene. Sáliváhan is a synonym of the Saka prince who founded the Saka era, called also Sakáditya, Sáli Pála, Shaktiváhana in these lists. Kank, the eponymous founder in the second list, is none other than Kanishka and is also said to have come from Gujrát, where we have recorded evidence of an Indo-Skythian rule in the Kshatrapa and the so-called 'Sáh' dynasty, and where we have a Khosa race to the present day. In the Suratha Pál of the fourth list we have also a reference to Suráshtra, the old name of the peninsula of Gujrát. Now we cannot imagine that all these coincidences are accidental and would point out that a true historical connection with the old Indo-Skythian dynasty underlies the occurrence of these names in the lists, and we believe that very many of the so-called Rájput houses have a similar origin, notably the hill dynasties and the Baisa in the plains.

Local traditions.

Having fairly established a connection between the Indo-Skythians and the local dynasties and bearing in mind that Joshimath in Garhwál was the first acknowledged seat of the Katyúri dynasty of Kumaon, we shall apply this knowledge to the local traditions. Legendary tales in the south of India state that Sáliváhana came from Ayodhya; the Askot chronicles give the same origin, but Mrityunjaya assigns him to Pratishthana on the Godávari. The accord between the Askot and south Indian traditions betrays the influence of the Mysore preachers and teachers whose representatives to the present day hold all the chief officers at Kedárnáth and Badrináth, and it is doubtless to their influence is due the remodelling of the local lists. Locally Sáliváhana was the avenger of the defeat of his tribesman Sakadatta or Sakwanti, the first conqueror of Dehli, and, as he was the greatest name in the national lists, he has been introduced into all the local lists, being in fact suzerain as well. Neither then nor now could any powerful monarch have his seat of government in the Garhwál or Kumaon hills, though the lord paramount of those districts, like the British of to-day, may have

held considerable possessions in the plains. The successors of Sáliváhan, whether of his family or not we have no means for deciding, are reported to have occupied Indraprastha and the hill-country to its north for several generations, for the *Rája-tarangani* states that Indraprastha after the conquest ceased to be the abode of royalty for nearly eight centuries. "Princes from the Siwálik or northern hills held it during this time and it long continued desolate until the Tuárs." General Cunningham looks on the date 736 A. D. for the rebuilding of Dehli by Anang Pál Tomár "as being established on grounds that are more than usually firm for Indian history." He also accepts the statement that Indraprastha remained desolate for many centuries after the Saka invasion, and it seems better to retain the indigenous tradition here than to start theories for which we have no foundation in fact. But even for this 'dark age' there are a few statements which throw some light on its history. Firishta[1] tells us that Jaichand left an infant son who succeeded him and who would have ruled in his stead had not his uncle Dihlu deposed him and with the aid of the nobles ascended the throne. "This prince as famous for his justice as for his valour devoted his time to the good of his subjects and built the city of Dehli. After having reigned only four years, Phúr (Porus), a Raja of Kumaon, collecting a considerable force, attacked Dihlu, took him prisoner and sent him in confinement to Rohtas, himself occupying the empire. Raja Phúr pushed on his conquest through Bang as far as the western ocean, and having collected a great army refused to pay tribute to the kings of Persia. The Brahmanical and other historians are agreed that Phúr marched his army to the frontier of India in order to oppose Alexander, on which occasion Phúr lost his life in battle after having reigned seventy-three years." The Greeks found Porus between the Hydaspes and the Akesines and a nephew of Porus in the next *duáb*. We may accept the suggestion that they were both Pauravas or descendants of Puru, for Plutarch makes Gegasius the progenitor of Phúr, and he may be identified with Yayáti.[2] We have another Porus, however, in the king already referred to, who sent an embassy to Augustus in B.C. 22—20, and this date would agree better with the time given in the local legend of Raja Phúr. We have

[1] Briggs' ed., *lxxiii.* [2] Cunn Arch. Rep., II., 17.

already suggested on other grounds that this Porus may have been an Indo-Skythian or Parthian, and here he is connected with Kumaon, of which he may have been suzerain. In another passage[1] Firishta tells us that Rámdeo Rathor between the years 440 and 470 A.D. was opposed in his conquests by the Raja of "Kumaon, who inherited his country and his crown from a long line of ancestors that had ruled upwards of 2,000 years. A sanguinary battle took place which lasted during the whole of one day, from sunrise to sunset, wherein many thousands were slain on both sides, till, at length, the Raja of Kumaon was defeated with the loss of all his elephants and treasure and fled to the hills." The Raja of Kumaon was compelled to give his daughter in marriage to the conqueror. There is nothing to add to this statement but that it corroborates the other tradition that princes from the Siwálik hills held some authority in the upper Duáb between the Saka conquest and the arrival of the Tomars. That Indraprastha was not entirely desolate during the period is shown by the inscription of Raja Dháva on the iron pillar[2] at Dehli which Prinsep from the form of the letters would assign to the third or fourth century, A. D.

Hwen Thsang.

Between the date of the Saka conquest of Indraprastha and the advent of the Chinese traveller Hwen Thsang, all that we can say regarding the history of these hills is that the country appears to have been divided amongst a number of petty princes, of whom sometimes one and sometimes another claimed paramount sway over the remainder. The chief of the Bhilang valley at one time enjoyed the greatest prestige and again a dynasty whose principal seat was in the Alaknanda valley near Joshimath. The Chinese Buddhist pilgrims Fah Hian, Hwui Seng and Sung Yun, whose travels have been translated by Mr. Beal, did not visit Kumaon, and we have to refer to the works of Hwen Thsang for our only information from this source on this period.[3] In 634 A. D. Hwen Thsang proceeded from Thanesar to Srughna in the Saháranpur district,[4] and thence across the Ganges to

[1] Briggs, *l. c.* p. lxxvii: Dowson's Elliot, V., 561. [2] J. A. S., Ben., 1839, p. 629: Thomas' Prinsep, *I.*, 319. [3] For this purpose we have the *Mémoires sur les Contrées Occidentales par Hiouen-Thsang*, translated by M. Stanislas Julien, 2 vols., Paris, 1857; and *Histoire de la vie de Hiouen-Thsang par Hoeï-li*, translated by the same, Paris. 1853. Also Cunningham's valuable commentary in his Ancient Geography of India, London, 1871. [4] Gaz., II., 245.

Madáwar in the Bijnor district.[1] He then describes Mayúra or Máyápura close to Hardwár and his journey to *Po-lo-ki-mo-pou-lo* or Brahmapura, which lay 300 *li* or 50 miles to the north of Madáwar. General Cunnigham writes:—"The northern direction is certainly erroneous, as it would have carried the pilgrim across the Ganges and back again into Srughna. We must therefore read north-east, in which direction lie the districts of Garhwál and Kumaon that once formed the famous kingdom of the *Katyúri* dynasty. That this is the country intended by the pilgrim is proved by the fact that it produced copper, which must refer to the well-known copper mines of Dhanpur and Pokhri in Garhwál, which have been worked from an early date." The *Mémoires*[2] describe the kingdom of Brahmapura as 4,000 *li* or 666 miles "in circuit surrounded on all sides by mountains. The capital is small, but the inhabitants are numerous and prosperous. The soil is fertile and seed-time and harvest occur at regular seasons. Copper and rock-crystal are produced here. The climate is slightly cold and the people are rough in their manners; a few devote themselves to literature, but the greater number prefer the pursuit of commerce. The inhabitants are naturally uncultivated, and there are followers of both the Buddhist and Brahmanical faiths. There are five monasteries within which reside a few monks and there are some dozen temples of the gods. The followers of the different Brahmanical sects dwell together without distinction. To the north of this kingdom in the midst of the great snowy mountains is the kingdom of *Sou-fa-la-na-kiu-ta-lo* or Suvarnagotra where gold of a superior quality is procured and hence its name. From east to west this kingdom has its greatest extension, but from north to south it is narrow. For many centuries the ruler has been a woman, and hence it is called the 'Kingdom of the queens.' The husband of the reigning sovereign has the title of king, but does not meddle in affairs of state. The men occupy themselves with war and husbandry. The soil is fertile and is favourable to the growth of a poor kind of barley, and the people rear large numbers of sheep and ponies. The climate is icy-cold and the inhabitants are abrupt and turbulent in their manners. This country touches on the east the country of the Tibetans, on the north is the country of Khoten and on the west is *San-po-ho* or Sampaha (?)"

[1] Gaz., V. [2] I., 221: *Voy. des Pèl.*, II., 231., *Vie*, p. 110.

Brahmapura.

General Cunningham writes :—"The ancient capital of the Katyúri Rajas was at Lakhanpur or Vairát-pattan on the Rámganga river about 80 miles in a direct line from Madáwar. If we might take the measurement from Kot-dwára, at the foot of the hills on the north-eastern frontier of Madáwar, the distance would agree with the 50 miles recorded by Hwen Thsang. It occurs to me, however, as a much more probable explanation of the discrepancy in the recorded bearing and distance that they most probably refer to Govisana, the next place visited by Hwen Thsang, from which Bairát lies exactly 50 miles due north." General Cunningham also refers to the position of Lakhanpur, in a valley only 3,339 feet above the level of the sea and to the fact that the country around is still fertile and allows of two crops being collected during the year as further corroborating his identification of Lakhanpur with Brahmapura. M. Vivien de St. Martin assigns Brahmapura to Srinagar in Garhwál, which however was of no importance until the present town was built in the early part of the seventeenth century. Others have suggested that the extensive ruins near Barhepura, about twelve miles to the north-east of Najíbabad in the Bijnor district, mark the site of Brahmapura; but this conjecture, apparently based on the similarity in sound of the two names, would conflict too much with the precise assignment of Hwen Thsang. The Chinese traveller has shown himself so accurate in the great majority of his statements that it would be contrary to all correct principles of interpretation to reject his distinct assertions before it is shown that they are incapable of any reasonable explanation. Such is very far from being the case in this instance, for in Bárahát in the valley of the Bhágírathi in independent Garhwál we have an ancient and well-known site almost exactly fifty miles due north of Hardwár, and which in climate, products and position both with regard to Madáwar and Suvarnagotra agrees with the description of Hwen Thsang. Bárahát was the seat of an old dynasty and contains numerous remains of temples and other buildings. The inscription on the *trisúl* of Aneka Malla written in the twelfth century and which still stands near the temple of Sukha shows that at that time it was a place of some importance.

The remains now existing[1] are chiefly found to the north-west of the river at the foot of a high hill where there is a level piece of ground. Temples, places of pilgrimage, holy pools and sacred streams abound, for this place was on the direct route to Gangotri. In support of this identification we may remark that the distance to Govisana, the next place visited, is measured from Madáwar, to which place Hwen Thsang must have returned in order to reach Govisana from Bárahát, whilst if he proceeded from Lakhanpur his road would have lain across the watershed into the Kosi valley.

Tradition regarding Lakhanpur.

It has been suggested, as we have seen, that the ancient name of Lakhanpur was Bairát, but the weight of local testimony connects this name with the ruins near Dhikuli on the Kosi. That Lakhanpur was an ancient residence of the Katyúris cannot be disputed, but the statement that it was their home in the seventh century is open to grave objections. An old verse embodies the popular tradition regarding its origin :—

'Asan wá há básan wá há sinhásan wá há
Wá há Brihma wá há Lakhanpur.'

Now the pedigrees of the Doti, Askot and Páli Katyúris all mention the names of Asanti Deva and Básanti Deva, and in the last these names head the list. In the Doti list, six names intervene between Básanti and Gauranga, the second name of the Páli list, and in the Askot list seven names intervene, but whether we are to assign these names to different persons of the same family, as is more probable, or to the same persons, the Páli list in this case retaining only the more remarkable names, there is nothing to show. Assuming that the names belong to different persons, then the Páli family must have branched off immediately after Básanti Deva. In the genealogical table of this branch from Asanti downwards given hereafter we have one Sáranga Deo, tenth in descent, and again one Sáranga Gosáin, fifteenth in decent, who settled at Támádhaun in Chaukot. On the image of the household deity in the family temple at Támádhaun we have

[1] Bárahát suffered much by the great earthquake of 1803, in which all the buildings were materially injured and many were completely buried in the ground. It is said that two to three hundred people perished, and since then few of the houses or temples have been restored : As. Res., XI., 476.

an inscription recording the name Sáranga Deo, and the date 1420 A.D. which if referred to the first Sáranga Deo will place the Asanti Deva in 1290 A.D. by following an average of thirteen years to each reign, and if referred to the second Sáranga Gosáin will place Asanti Deva in 1225 A.D. Taking the Doti list there are eighteen reigns between Asanti Deva and the contemporary of Ratan Chand, Rainka Arjuna Sáhi, who lived in 1462 A.D. If we strike out some twenty years on account of the disturbance in the succession which must have shortened the length of the reigns as well as for the unexpired portion of Arjuna Sáhi's reign, an application of the same calculation gives us 1228 A.D. for Asanti Deva. We may, therefore, fairly conclude that according to local tradition Lakhanpur was founded as late as the beginning of the thirteenth century.

The golden land.

The kingdom of Suvarna-kutula, or Suvarna-gotra as rendered by M. Julien, must have lain to the north from Ganai in the valley of the Gauri (Gori) if we adhere to Lakhanpur as the site to be identified with Brahmapura or across the passes in Tibet if we make Bárabát the Brahmapura of our traveller, and that the latter is the correct interpretation will be shown conclusively hereafter. There is no doubt that the valley of the Gori in Juhár in which Milam is situate has at the present day a considerable population and commands a large trade with Tibet; but in former times the valley of the Alaknanda was the more populous of the two, for Joshimath claims to have been the earliest seat of the Katyúris, an honour to which Juhár cannot aspire. The Juhár tradition, however, is interesting in itself, despite the fabulous details with which it is embellished and doubtless contains a residuum of fact. In any case it is all that the people have to say about themselves, and on this account alone is worth preserving; and as it is supposed to relate to this very period, we may introduce it here and as nearly as possible in the words of the narrator:—

Story of the colonisation of Juhár.

"Jíbar or Jíwar is the old name of Juhár, and long before the present race of men came into the world there were two princes (principalities?) in Juhár called Halduwa and Pingaluwa. The former extended from the snows to Mápa and the latter from Mápa to Laspa. The people of these countries are said to have been covered with hair even to their tongues. There was no pass open at

that time to Hundes. High up on the cliffs near the source of the Gori glacier lived a huge bird (*púru*), whose wings when extended were able to cover the valley at Mápa and who lived on human beings. The bird fed on the hapless inhabitants of Halduwa and Pingaluwa until but a few families remained. Sákya Láma lived at this time in a great cave near Laphkhel.[1] Every morning the Láma used to leave his cave and come to Laphkhel, where he used to sit all day at his devotions, flying[2] back at night to his cave. There was at that time in the service of the Láma a man to whom the Láma wished to do service and he called the man to him and said :—'Go across the snowy mountains to the south and you will find a place called Juhar, where the *púru* has eaten up Halduwa and Pingaluwa, who lived there. I will give thee a bow and arrow with which thou shalt fight the *púru* and kill it; go, take possession of and colonise Juhár.' The man answered and said :—'Thy servant will obey the voice of his master, but he knoweth not the way and who shall guide him.' The Láma said:—'Fear not, I will provide thee a guide,but take care that thou leave him not. Whatever shape he may assume, follow on and fear not; remember that he is thy guide.' The man and the guide set out together, and after a short time the guide took the form of a dog and the place was called after him Kingri.[3] The man followed the dog and it became a stag, hence the name Dol-dúnga; then the stag became a bear and the place was called Topi-dúnga; and again a camel, hence the name Unta-dhúra: then a tiger, hence the name Dúng-udiyár; and finally a hare, which lost itself in Pingaluwa's country at Samgaon.

On looking about him the man saw nothing but the bones of the people who had been eaten by the *púru*, and becoming alarmed fled and took refuge in a house which he found near. Here he found a very old woman covered with hair, and he inquired of her who she was and how the country had become desolate. She told him that she was the last surviving inhabitant of Pingaluwa and Halduwa's country and added:—'I have remained for the *púru's* food to-day and you have come to give him his dinner for to-morrow: well done of you.' The man then told her the story of his master the Láma and showed her his bow and arrows and asked her what were the capabilities of the country. She told him that it produced *ua* (*Hordeum cæleste*) and *pháphar* (*Fagopyrum tataricum*), that there were plenty of houses but no salt, and that they could not get to Húndes, where salt was to be had for the asking for it. Whilst thus engaged in conversation he suddenly heard a great whirr of wings and the bird appeared and seized the old woman and eat her up, Nothing daunted the man seized his bow and shot his arrows until he killed the bird. Then he lighted a fire and said to himself:—'I shall go back to the Láma and get some salt. I am pleased with this place, and this shall be a sign to me that if the valley is intended for me this fire shall not go out until I return, and if the valley is not to be mine then the fire shall die out.' So saying he returned to the Láma by the way which he had come and told the Láma all that had befallen him. He found his old guide at Laphkhel in his

[1] At the foot of the Balchha-dhúra pass. [2] The power of flying was one of the six essential attributes of the sacred Lámas. [3] A peak to the east of the Chidamu or Kyungar encamping-ground is still called Kingribingri (*king* = a dog). Dol-dúnga at the confluence of the Dol and Lanka (*Dol* = *jarau* = *Rusa aristotelis*). Topi-dúnga on the left bank of the Lanka (*topi* = a bear). Unta or Uta-dhúra is the pass above Milam. Dúnga is at the foot of the pass and Samgaon is Shamgang on the way to Milam.

proper shape and then asked the Láma for salt. 'The Láma said:—'There is plenty of salt in Hundes, but I will produce it for you here.' The Láma then took salt and sowed it over the land like grain and promised that the supply should be sufficient for the entire wants of the new settlement. Having thus spoken the Lama flew away to his cave and was never seen again, and to the present day the herbage here is so saturated with salt that there is sufficient for the Bhotiya flocks. The people still say that this salt is one of Sákya's gifts, and when Buddhist priests visit the valley they ask for alms in the name of Sákya who gave the people salt.

When Sákya Láma flew away his servant returned to Juhár and there he found his fire still alight and accepting the omen resolved to remain in the valley. He collected a number of people called Sokas and established them near Milam and built a temple in honour of Sákya. In the time of Sonpati Soka, who lived at Madkot, the route to Hundes by the Madkuwa river which was used by the people of Athási, was opened and much gold was acquired by him. This route has since fallen into disuse owing to the accumulation of snow and the dèbris of avalanches. These events occurred before the time of the Katyúri Rájas and in course of time the Sokas also disappeared. They were followed by the ancestors of the present Milamwáls, who came from Tibet into the valley in this manner. They say that they are of Rajpút origin and that their fathers served one of the Garhwál Rájas who gave them Jola in Badhán in *jágír*, and hence they were called Ráwats. One of these went through Malári of Niti into Húndes and entered the service of the Surajbansi Rája of Húndes. Here he remained for a time, and being fond of the chase wandered over the hills towards the south in pursuit of game. One day he followed a wild cow from early morn to evening and saw it disappear at the confluence of the Gunka and the Gori, and accepting this as a good omen the Ráwat much fatigued with the chase called the place Mi-dúnga[1] and built there the village of Milam, the inhabitants of which are known to the present day as Ráwats or Sokas.

Such is the only tradition that exists regarding the early settlements in Juhár. As to the Níti valley, the tradition is that the branch of the Katyúri dynasty who subsequently occupied the Katyúr valley was originally established in Jyotirdhám[2] or Joshimath on the Dhauli, the river of Níti. There are no indications or traditions of any Amazonian kingdom in the valley, and we must search for it across the passes in Tibet.

The Amazonian kingdom.

The Chinese name of the Amazonian kingdom was Kinchi, and M. Julien makes Sampaha which lay to the west of it the same as *Mo-lo-so* or Malasa, which was some 2,000 *li* or 333 miles to the north of *Lo-hou-lo*, the modern Lahúl. Hwen Thsang describes the journey from Lahúl to Malasa as difficult and attended by an icy piercing wind so often described by

[1] From *mi*, man and *dúnga*, encamping-ground or resting-place. [2] The place where the great *Jyotir ling*, emblem of Mahádeo, was established.

travellers in the Himálaya and snow-storms. This clearly brings us across the snowy range to the trans-Himálayan valley of the Satlaj. In D'Anville's reproduction of the Jesuits' map of Tibet this tract is marked as Sanke Somtou and lies to the west of Tchoumourti or Chamurti, a district and town of the modern *g*Nári. The country lying between the Ganges and the Matchou or Karnáli is called Nacra Somtou in the same map. *g*Nári is celebrated for its mines of gold and is bounded on the north by Khoten and on the east by Tibet proper. The Vishnu-Puráṇa[1] in its prophetic chapters declares that the Kanakas or Kánas will possess the Amazon country (*Stri-rájya*) and that called Múshika. The Váyu Puráṇa reads Bhokshyaka or Bhokhyaka for Múshika and others read Búshika. Wilson writes:—"*Stri-rájya* is usually placed in Bhot. It may, perhaps, here designate Malabar, where polyandry equally prevails. Múshika or the country of thieves was the pirate coast of the Konkan." In the *Rája Tarangani*, Lalitáditya (730A.D.) is said[2] to have erected a statute of Nrihari in the Stri Rájya, showing that it was near Kashmír; but in the Chinese annals[3] we have a record which corroborates the statement of Hwen Thsang and proves that the Amazonian kingdom lay in Tibet and was a reality. From it we learn that there was a tribe in Eastern Tibet known as the Nu-wang from the fact of their being ruled by a woman. In the Tung history they are called Tung-Nu or Eastern-Nu, to distinguish them from a tribe possessing similar institutions to the west. They are first mentioned in the Northern history, and in the Sui history an account is given of an embassy from the Eastern-Nu in 586 A.D., in which it is stated that:—

"The people in each successive reign make a woman their prince. The surname of the sovereign is Supí. They build cities in the mountains with houses of many stories, the sovereign's house having nine, in which there are several hundreds of female attendants and a court is held every five days. The men, having nothing to do with the government, only fight and cultivate the land. Both men and women paint their faces of many colours. They live principally by hunting and the weather is very cold. The natural products are copper and gold ore, cinnabar,

[1] Wilson, IX., 222. [2] As. Res XV., 49. The highlands of Tibet have always been notorious for the wandering bands of thieves that infest them. In the Mahábhárata the Kankas and Khasas are mentioned as bringing presents to the Páṇḍavas of *pipṭlika* gold which was so called because it was collected by ants, *pipṭlika*, in allusion to the burrows of the miners in the Tibetan gold-fields. [3] Dr. Bushell, J. R. A. S., XII., 531. It is possible that in Suvarna-gotra we have the origin of the Suvarna-bhúmi and Hiranya-máya of the Puránas. Most of the gold imported from Tibet comes by this route to the present day.

musk, yaks and two breeds of horses, in addition to salt in abundance, which they carry to India and gain much by the traffic. They have had frequent wars with Tanghsiang and with India. When the queen dies they collect a large sum of gold money and select from her family two clever women, of which one is made the queen and the other the lesser sovereign. * * The title of the queen is Pinchin and of the female ministers of state is Kaopali. * * The sons take the surname of the mother. The written characters are the same as those of India and the eleventh Chinese month is the beginning of their year. * * At the burial of their sovereign several tens of the great ministers and relatives are buried at the same time. In the period Wu-te (618-626 A.D.) the queen named Tang pang first sent envoys with tribute. Since the year 742 A.D they elected a man as ruler and a few years afterwards the state was absorbed by Lhása."

There is therefore no need to doubt the statements of Hwen Thsang or the traditions of the Indians regarding this Amazonian kingdom, since it was not until some time after the visit of Hwen Thsang to Brahmapura that the western Chiang submitted to Lhása, as will be seen from the following short sketch of Tibetan history at this time.

Tibet from Chinese sources.

The country to which the name Tibet is now applied appears in the Chinese annals of the Yang dynasty (from 618 A.D.) as T'ufan, which should be read T'u-po: hence in an inscription at Lhása dated in 822 A.D. we find the native Tibetan name for the country 'Bod' rendered in Chinese by 'Fan.'[1] In the records of the Tátar Liaos who reigned in northern China in the latter part of the eleventh century Tibet is called T'u-pot'é, in which the latter syllable represents Bod. During the Ming dynasty the name was changed to Wussŭtsang from the two principal provinces *d*bus and *g*tsang, hence the modern name Weitsang. The word *h*si or 'western' is also applied to the country: hence *h*si-*t*sang and *h*si-fan, and the people are called Tupote and Tangkute. The European name is derived from the Arabic through the Mongol in the form Tibet which occurs in the travels of the merchant Sulaiman as early as 851 A.D. During the Han dynasty Tibet was occupied by a number of tribes called Khiang or Chiang,[2] and towards the close of the fourth century a number of these were united together under Huti-pusuyeh,[3] chief of the Fa-chiang, and

[1] Bushell, J. R. A. S., XII., 435: he shows, as Rémusat had remarked, that the character for '*fan*' is a phonetic which has the two sounds '*fan*' and '*po*.
[2] The name Chiang is composed of the characters for 'man' and 'sheep,' indicating their pastoral character.
[3] His descendants were called Tu-fan, their surname being Tusuyeh.

formed the nucleus of the kingdom of Tibet. Under the Tang dynasty who ruled until the end of the ninth century the new kingdom was called Tu-fan, pronounced Tu-po and equivalent to Tu-bod. The first direct communication of the Tibetans with China was in 634 A.D., when Chitsunglungstan, the Tsanpu of Lhása, sent an embassy to China and in 641 A.D. received a daughter of the Emperor in marriage and introduced Chinese customs at his court. On the death of Siláditya king of Magadha one of his ministers usurped the throne and plundered the Chinese envoy Wang Yuantse, who was returning with presents for his master. Wang applied for assistance to the Tibetans, who led 1,200 chosen warriors and 7,000 Nepálese horsemen to India and captured the offender and brought him prisoner to the imperial capital in 648 A.D. Lungstan died in 650 A.D. and was succeeded by his grandson, under whom the Tibetan kingdom was firmly established. The Chiang tribes who had hitherto stood aloof were glad to connect themselves with the rising power at Lhása and the hostile Tukuhun[1] were driven out of the country (666A.D). The Tibetans now more than held their own against China and defeated successive armies sent against them. On the east their authority extended to Ssuchuen; on the west to Kashgár; on the north to the Tuehueh or Turkish country, and on the south to Polomen or Magadha, apparently used as a generic name for India. All these successes were gained by a family of hereditary ministers or mayors of the palace, the last of whom was executed by the Tsanpu Chinuhsilung in 699A.D. Chinuhsilung himself died during an expedition against Nepál and India[2] in 703 A.D.

Kings of Tibet.

Csoma deKörösi gives from Tibetan sources a list of kings of Tibet commencing with the Tsanpu Nyákhrí, an Indian refugee prince of the family of the Lichchhavis of Vaisáli[3] and the reputed founder or at least the great restorer of the Pon religion. The Lichchhavis were determined opponents of Sákya and were Surajbansi Kshatriyas by birth, and thus the Juhár tradition of a Rajpút race in Tibet is confirmed. The emigration to Tibet took place according to M. Csoma in B.C. 250, and this dynasty of Indian origin ruled there.

[1] An eastern Tátar race settled near Kokonor (*l. c.*, p. 527.) [2] The same record gives an interesting account of the wars between China and Tibet up to 856 A.D., but we have nothing to do with this here. [3] Near Patna, Cunn. Arch. Rep. I., 63: Ladák, 356: Lassen, III., 774. In the temple of Jágeswar, beyond Almora there is a brass image of a Pon Rája.

Srong b Tsan sGampo, who ascended[1] the throne in 629-30 A.D., is represented as a great conqueror, a religious reformer and a pioneer of civilisation in Tibet, and can be no other than the Chitsunglung-stan of the Chinese records, who removed the seat of government from the Yarlung valley to Lhása and married a daughter of the Emperor of China. The following list of kings occur in the Chinese annals :—

Hutipusuyeh, chief of the Fa-chiang, to whose family belonged Fanni or Supuyeh who was a boy in 414 A.D., and succeeded in establishing the nucleus of a state in 425 A.D. After him reigned a sovereign named Hsiahsitungmo. Tungmo begat Totutu : Tutu begat Chiehlishihjo ; Chiehli begat Pumungjo: Pumung begat Chusujo: Chusu begat Luntsansu : Luntsan begat Chitsunglung-tsan, also called Chisamung and styled Fuyehshih. He was a minor when he ascended the throne in 630 and died 650 A.D. Chitsung was succeeded by his grandson Chilipapu, a minor who deceased in 679 A.D., and was followed by his son only eight years of age, Chinuh Ilung, who died in 703 A.D. The next Tsanpu was Chilisulungliesihtsan Chilisotsan, aged seven, who died in 755 A.D., and was succeeded by his son Sohsilungliehtsan, who took Ch'angan, the then capital of China, in 763 A.D. We find Chilitsan surnamed Huluti reigning in 780 and succeeded by his eldest son Tsuchihchien in 797. He died in 798 and was succeeded by his unnamed brother who died in 804 and by another who died in 816, when Kolikotsu succeeded with the title Yitai. The last named died in 838 and was succeeded by his brother Tamo, who died in 842, when the infant Chilihu of the house of Lin and nephew of the consort of Tamo was set up by one party and civil war ensued. Shangkunje declared himself Tsanpu in 849 and perished in battle with the Uigurs in 866 A.D. These names may be compared with those given[2] from Tibetan sources by M. Csoma, M. Klaproth and Sarat Chander Das.

Govisana.

The kingdom of *Kiu-pi-choang-na*, which M. Julien renders by Govisana, lay 400 *li* or 67 miles to the south-east of Madáwar.[3] It was about 2,000

[1] Lassen *l. c* : a Lichchhavi prince ruled at this time in Nepál (Mèm., I., 407): the early date given to the first Lichchhavi prince between whom and Srongtsan Gampo there were only thirty-one reigns (879÷32=27½) is very doubtful.
[2] Tibetan Grammar, p. 180 : Thomas's Prinsep, II., 289-90 : Klaproth's 'Tableaux historiques,' p. 135 : Alphabetum Tibetanum of Georgius, Rome, 1762.
[3] Voy des Pèl., II., 233 ; Mèm. I., 233 ; Cunn. Anc. Geogh., 357.

li or 334 miles in circuit and the capital was about 15 *li* or 2½ miles in circuit. The city was built on an elevated site difficult of access and was surrounded by groves, tanks and fish-ponds. There was a numerous population of simple and rustic habits. The soil was fertile and resembled that of Madáwar. Many devoted themselves to literature and the practice of religious virtues, but many were still followers of the Brahmanical faith. There were two monasteries occupied by one hundred monks who studied the Hínayána-sutras and one temple of the gods. The larger of the two monasteries was close to the city and possessed a *stupa* about two hundred feet high built by Asoka to mark the place where for the space of a month Buddha expounded the law. Close by was a place where the four past Buddhas had been accustomed to take exercise, and near it were two *stupas* erected to cover the nails and hair of Buddha. Four hundred *li* or 67 miles to the south-east lay the kingdom of *O-hi-tchi-ta-lo* or Ahichhatra. General Cunningham identifies Govisana with the old fort near the village of Ujain one mile to the east of Káshipur in the Tarái district. The true bearing of Káshipur from Madáwar is east south-east, and by the road he travelled General Cunningham makes the distance 66 miles. He also states the position of Káshipur will agree with its bearing from Ahichhatra, the next place visited by Hwen Thsang and of which the site is well established. Káshipur itself was founded by Káshináth Adhikári as late as 1718 A D., and the old fort is called after the name of the nearest village. The circuit of the fort and the ruins in its immediate neighbourhood is very nearly the same as that given by Hwen Thsang, and there are numerous groves, tanks and fish-ponds around the place. One of these known as the Drona-ságar is still a favourite place of resort for pilgrims going to visit the sacred shrines in the snowy range. We would, however, identify Govisana with the ruins near Dhikuli some 22 miles to the north of Káshipur on the river Rámganga, and which subsequently formed the site of the winter residence of both Katyúris and Chands. The elevated position of this site and the presence of remains sufficient to account for the existence of a stupa and other buildings as well as its identification in popular tradition with the ancient city of Vairát-pátan lend great weight to this view, but until these ruins are more closely

examined this point cannot be decided, and in the meantime General Cunningham's identification may be allowed to stand. We have now to leave the pleasant pages of Hwen Thsang and for many centuries be content to grope our way amidst the traditions half fact and half fable that have survived.

Annihilation of Buddhism.

Buddhism, as we have seen, was fairly established in Kumaon in the seventh century, but between the date of Hwen Thsang's visit towards the middle of the seventh century and the period in which Sankara Achárya flourished such changes occurred that after his time hardly a single Buddhist temple remained in the Kumaon Himálaya. The local tradition is distinct on this point, and it follows that if the institutions established by Sankara survive to the present day, the Buddhists must have succumbed either before his time or through his influence. In another chapter we shall give some account of his life and writings, and here we shall review the evidence as to the age in which he lived, which is so intimately connected with that strange upheaval of the old religion and the dispersion of its opponents. Wilson, in the preface to the first edition of his Sanskrit Dictionary, notices many of the statements made regarding the age of Sankara.

Sankara Achárya.

From him[1] we learn that the Kadáli Brahmans who follow the teaching of Sankara declare that he lived some two thousand years ago; others place him about the beginning of the Christian era, or in the third or fourth century after Christ, or as contemporary with Tiru Vikramadeva, sovereign of Skandapura in the Dakhin in 178 A.D. The people of the Sringagiri or Sringeri *math* on the edge of the western ghâts in the Mysore territory, of which Sankara himself was the second mahunt, assign him an antiquity of 1,600 years. Wilson gives a list of the mahunts of this institution showing twenty-seven descents from Sankara, and allowing a quarter of a century to each mahunt, a period of 675 years should elapse from the founder, but as Wilson could not determine the date when the list closed he did not attach any importance to the result. Dr. Burnell in writing of the time of Hwen Thsang (640 A.D.) incidentally states, 'as the Brahmanical system of Sankara sprung up in the next half century,'

[1] For details and references, see Wilson's Works, I., 200: V., 188: XII., 5.

thus making the great reformer live in the end of the seventh century. Williams in his dictionary gives the dates 650-740 A.D. The Vaishnava Brahmans in Malabar place Sankara in the tenth century. Dr. Taylor in his translation of the Prabodha Chandrodaya thinks that if we place him about 900 A.D., we shall not be far from the truth, and both Colebrooke[1] and Rammohun Roy refer him to 1000 A.D. The latter writer, who was a diligent student of Sankara's works, elsewhere infers that "from a calculation of the spiritual generations of the followers of Sankara Swámi from his time up to this date, he seems to have lived between the seventh and eighth centuries of the Christian era." The Kerala Utpatti,[2] devoted to the history of Malabar, makes Sankara contemporary with Cheruman Perumal, a prince who granted many privileges to Christians and founded Calicut. According to Scaliger, Calicut was founded in 907 or following another authority in 825 A.D. Wilson in one place assigns Sankara to the end of the eighth and beginning of the ninth century A.D., and in another place writes that subsequent inquiry has failed to add any reasons to those assigned by him for his proposed inference, but it has offered nothing to invalidate or weaken the conclusion arrived at. Weber[3] places Sankara "in about the eighth century."

Sankara in Nepál.

In the local history of Nepal[4] we have an interesting record of the traditions that have survived regarding Sankara Achárya's visit to that country which may throw some light on the local traditions respecting him in Kumaon. On the death of Brikhadeva Barma, his brother Bálárchana Deva was regent of Nepál, and at this time Sankara Achárya visited the valley in pursuit of the Buddhists. Here he found that all the four castes were of that religion: some lived in Viháras as Bhikshus; some were Srávakas, also living in Viháras; some were Tántrikas called Achárya and some were Grihasthas, also following the Buddhist religion. There were no learned men and when some of the Grihastha Achárya endeavoured to meet him in argument, they were soon defeated.

[1] In the preface to the Dáyabhága. [2] As. Res. V., 5. [3] Hist. Ind. Lit., p. 51, which presumably gives the latest results on this subject. Weber writes:—"Sankara's date has not, unfortunately, been more accurately determined as yet. He passes at the same time for a zealous adversary of the Buddhists, and is therefore called a Saiva or follower of Siva. In his works, however, he appears as a worshipper of Vásudeva, whom he puts forward as the real incarnation or representative of *Brahma*." [4] Wright's Nepál, 128.

"Some of them fled and some were put to death. Some who would not allow that they were defeated were also killed. Wherefore many confessed that they were vanquished, though in reality not convinced that they were in error. These he ordered to do *hinsa* (*i.e.*, to sacrifice aminals), which is in direct opposition to the tenets of the Buddhist religion. He likewise compelled the Bhikshunis or nuns to marry, and forced the Grihasthas to shave the knot of hair on the crown of their heads when performing the *chúra-karma*, or first shaving of the head. Thus he placed the Banaprasthas (ascetics) and Grihasthas on the same footing. He also put a stop to many of their religious ceremonies and cut their Brahmanical threads. There were at that time 84,000 works on the Buddhist religion, which he searched for and destroyed. He then went to the Manichúra mountain, to destroy the Buddhists there. Six times the goddess Mani Jogini raised storms and prevented his ascending the mountains, but the seventh time he succeeded. He then decided that Mahákála, who was a Buddha and abhorred *hinsa*, should have animals sacrificed to him. Mani Jogini or Ugra-tárini was named by him Bajra Jogini. Having thus overcome the Buddhists, he introduced the Saiva religion in the place of that of Buddha * * Sankara thus destroyed the Buddhist religion and allowed none to follow it: but he was obliged to leave Bauddhamárgís in some places as priest of temples, when he found that no other persons would be able to propitiate the gods placed in them by great Bauddhamárgís."

When the children of some of these Bauddhamárgi priests were desirous of performing the *chúrá-karma*, or ceremony of shaving the head, they are reported to have said:—"Sankara has destroyed the Bauddhamárgís. He has turned out the Bauddhamárgí-grihastha Brahmans who hitherto worshipped Pasupati and has appointed in their stead Brahmans from the Dakhin and those Bauddhamárgís who have accepted Sankara's doctrines have been made priests of Guhjísware and other places." Our fathers obeyed not, but worshipped the old deities as before. Are we to abandon the gods of our forefathers and follow Sankara's direction to perform the *chúra-karma*, without which we cannot undertake the duties of an Achárya? In this dilemma, they consulted the Bhikshus who had married the Bhikshunis at Sankara's command, and were told that the people of that place remained silent through fear of Sankara, but had kept the truth in their hearts. They had, however, been visited with goitre as a punishment for their faintheartedness, and it was the duty of all who could do so to leave at once a place where the worship of their old deities was not permitted them. Accordingly they emigrated to Pingala Bahál and, appointing Bhikshus to follow the Tantra Shástras, made a rule that each in turn should take charge of the image of Sákya (Buddha).

The researches of Wilson and Hodgson show us that this is a fair representation of what actually took place in Nepál, and there is no reason to believe that the expulsion of the Buddhist priests from Kumaon took place either at a different time or at other hands. The universal tradition is that Sankara came into Kumaon and drove out the Buddhists and unbelievers and restored the ancient religion. Kumárila Bhatta, the predecessor of Sankara, was equally with him a rigid maintainer of the orthodox faith and is credited with being the principal leader in the exterminating crusade waged against the Buddhists and heretics of all classes. Sankara was ably aided by Udáyana Achárya and the Saiva and Vaishnava princes, who from political motives were only too glad to assist in and profit by the destruction of those who had usurped the fairest provinces of Hindustán. As we shall see hereafter, the worship of Vásudeva or Básdeo as the representative on earth of the great god was re-established by Sankara. In Kumaon, as in Nepál, Sankara displaced the Bauddhamárgi priests of Pasupati at Kedár and of Náráyana at Badrináth and in their place introduced priests from the Dakhin, whose successors still manage the affairs of those temples. To keep up the prestige of his new arrangements, Sankara through his followers preached everywhere the efficacy of pilgrimage to the holy shrines and doubtless the facility of communication and the influx of orthodox pilgrims to Badari and Kedár prevented[1] a relapse into Buddhism in Kumaon, whilst the absence of communication with the plains led to a revival of the friendly feeling between the followers of the two religions in Nepál which has continued to exist to the present day. So far therefore as we can see, the dispersion or absorption of the Buddhists in Kumaon was due to the efforts of Sankara towards the end of the seventh or beginning of the eighth century of our era, and that this must have been accompanied by considerable political disturbances may be inferred from the history of all other similar revolutions.

The Katyúrís, regarding whom we have already had something to record, were, according to local tradition, the ruling family in

[1] The belt of exclusive Brahmanism lies between the Káli on the east (or perhaps the Karnáli) and the Tons on the west, which contain the great pilgrim routes. Orthodoxy is here rampant and very profitable.

Kumaon both before and after the great religious cataclysm of the eighth century. After the time of Sankara we find them in the valley of the Alaknanda at Joshimath in Garhwál. There is nothing to show how they settled there, but from what we have recorded we may consider them as one of the many petty dynasties at this time ruling in Garhwál. The Katyúrís of the Katyúr valley traced back their origin to Joshimath and every existing branch of the family traces back its origin to Katyúr. The ancient temple of Básdeo at Joshimath is said to be the oldest of all and also to bear the name of the first of the Katyúri kings.[1] If in connection with the fact that Vásudeva was the name given by Sankara to the form of the Supreme being whose worship he principally inculcated we remember that the Katyúrís in the few inscriptions that have come down to us are recorded as devoted followers of the Brahmanical religion, we may safely assume that they belonged to the ruling power that came forward and aided Sankara in his reforms, and therefore enjoyed the political advantages which accrued from the suppression of the monasteries and the spoiling of the Bauddha families. In fact, the earliest traditions record that the possessions of these Joshimath Katyúrís extended from the Satlaj as far as the Gandaki and from the snow to the plains including the whole of Rohilkhand.

Katyúrís.

The cause of the emigration from Joshimath to the Katyúr valley is told in the following legend:—

"A descendant of Básdeo went to hunt in the jungles one day, and during his absence Vishnu, in his man-lion incarnation as Nar-Sinha, taking the shape of a man, visited the palace and asked the wife of the absent prince for food. The Rání gave the man enough to eat and after eating he lay down on the Raja's bed. When the Raja returned from the chase and found a stranger asleep on his bed, he drew his sword and struck him on the arm, but lo! instead of blood, milk flowed forth from the wound. The Raja was terrified at the omen and called his Rání to counsel and she said:—"No doubt this is a *debta*: why did you strike him?" The Raja then addressed Nar-Sinha and asked that his crime might be punished. On this the deity disclosed himself and said:—"I am Nar-Sinha. I was pleased with thee and therefore came to thy darbár: now thy fault shall be punished in this wise: thou shalt leave this pleasant place Jyotirdhám and go into Katyúr and there establish thy home. Remember that this wound

[1] In this connection we may recall to mind the Devaputra Vásudeva, the third of the Turushka kings of Kashmír. The Katyúri Raja was styled *Shí Básdeo Giriráj Chakra Chúramani.*

which thou hast given me shall also be seen on the image in my temple, and when that image shall fall to pieces and the hand shall no more remain, thy house shall fall to ruin and thy dynasty shall disappear from amongst the princes of the world."

So saying Nar-Sinha departed and was no more seen by the Raja. Another story makes Sankaráchárya the unwelcome visitor to the Ráni whilst her husband Básdeo was engaged in his ablutions at Vishnuprayág. Stripped of its embellishments the story would seem to show that the descendants of Básdeo were obliged to abandon Joshimath owing to religious quarrels. The preferential worship of Siva and Vishnu began to be taught even by the immediate followers of Sankara and soon led to dissensions, the history of which will be related elsewhere.

The immediate result of the interview with Nar-Sinha was that the Raja set out for the valley of the Gomati[1] and near the present village of Baijnáth founded a city which he called after the war-like son of Mahádeo by the name Kárttikeyapura. He found there the ruins of an old town named Karbírpur and used the materials for rebuilding the temple to Kárttikeya and also for constructing wells, reservoirs and bazars. The question whether the dynasty gave its name to the valley which ever afterwards was known as Katyúr or the valley gave its name to the family who ruled in it is of some importance in our researches. The name Katyúr may be derived from that of the capital city, the Páli form of which would be Kattikeyapura, easily shortened into Kattikyúra and Katyúra, but it appears equally probable that the resemblance between the name Katyúra and that of their capital city is purely accidental. The dynasty must have had a tribal name long before Kárttikeyapura was occupied, and it would be contrary to all precedent that this should be exchanged for a corrupted form of the name of their new capital city. It is therefore much more likely that the dynasty gave their tribal name to the valley and that this name was Kator or Katyúr. Some have endeavoured to connect this name with the Surajbansi tribe of Katehiriya Rajpúts, who gave their name to the tract subsequently known as Rohilkhand, but this suggestion is opposed to all that we know regarding that clan of Rajpúts and is entirely unsupported

Kárttikeyapura.

[1] Joins the Sarju at Bágeswar.

by any received tradition either in the hills or in the plains. Most probably as we have seen, we have to look in a very different direction for the origin of the name Katyúri and that it is derived from the royal race of Katúre, and in this connection it may be remarked that Kárttikeya was a favourite deity of the Turushka princes of Kashmír and occurs in the form Skanda on their coins.

Inscriptions.

The only actual records of the Katyúris that have come down to us consist of six inscriptions, five of which are grants engraved on copper and one is a similar record inscribed on stone. The last belongs to the temple of Siva as Vyaghreswar (the tiger-lord) or Vákeswar (the lord of eloquence) situated at the junction of the Gomati and Sarju in Patti Katyúr of Kumaon. The slab on which the writing is inscribed is, unfortunately, much injured, especially in the right lower corner, where the date has been obliterated. It records the grant by Sri Bhúdeva Deva of a village and land to the temple of Vyaghreswar and gives the names of seven Rajas, the ancestors of the donor,[1] as follows:—

1. Basantana Deva.
2. Kharppara Deva.
3. Kalyánrája Deva.
4. Tribhúvanarája Deva.
5. Nimbarata Deva.
6. Ishtarana Deva.
7. Laliteswara Deva.
8. Bhúdeva Deva.

The following is a tentative translation[2] of this inscription made from copies furnished by Mr. Traill:—

Bágeswar Inscription.

Blessing and salutation. On the southern part of this beautiful temple, the royal lineage is inscribed by learned persons.

Bow down at the foot of Paradeva placed at the gate called Ninúnanuti at Pavupidadata in the village of Námya which destroys the nets of animals. There was a raja named Masantana Deva who was a king of kings most venerable and wealthy. In his wife, the queen named Sajyanarányevha, who knew no one but her husband, was conceived a raja who was also a king of kings, the richest, the most respected of his time, worthy to be trusted and prosperous; who set apart successively provisions for the worship of Parameswara and caused several public roads to be constructed leading to Jayakúlabhúkti and who provided fragrant substances, flowers, incense, lamps and ointments for Baghreswara

[1] J. A. S. Ben., VII., 1,056. The names in the text differ from those given in the Journal of the Asiatic Society, but as they were taken on the spot by Rudradatta Pant, a competent Sanskrit scholar, they are retained here in preference to those taken from the copy. [2] By Saroda Prasáda Chakravartti.

Deva in Ambalipalika and who was the protector in battle; who, moreover, gave fragrant substances, flowers, &c., and the village named Sarneswara Grama which his father had granted to the Vaishnavas for worship of the abovementioned god. Who erected buildings on the side of the public roads. As long as the sun and moon exists so long shall there his virtuous deeds exist.

His son was Kharpara Deva, the king of kings, respectable and wealthy; in his wife, * * * who was much devoted to him, was born Adhidhaja, who was most wealthy, respectable and learned. Of his queen Ladhdha Devi, who loved her husband dearly, was born Tribhuvana Raja Deva, who was active, rich, honorable and intelligent. He gave two *dronas* of a fruitful field named Náya in the village Jayakúlabhútika to the above god and also ordered the fragrant substances, &c., produced in it, to be employed in the worship of the same god. It is also worthy to be known that he was the intimate friend of the son of the Kiráta who gave two and a half *dronas* land to the above-mentioned god and to the god Gambiyapinda. Another son of Adhidhaja gave one *drona* of land to the god Bahárake and moreover caused a grant of two bighas of land to be engraved on a stone in the Sambat year 11. He also gave one *drona* of land to the god Baghreswara and fourteen parcels of land to Chandalnúnda Debi and he established a *prapa* (*baoli* or well) in honour of the former. All these tracts of land have been consecrated to the god Baghreswara for his worship.

There was another Rája named Nunvarata who was possessed of compassion, sincerity, truth, strength, good dispositions, heroism, magnanimity, intellect, politeness and good character, of a charming person, adorned with morals and with several eminent qualities, active in conqueri ng by the force of his bow held in hand, and born for worshipping the lily feet of the owner of Nandana and Amarávati, who acquired fame by the force of his arms through the favour of Durjadhi, who wears matted hairs on his head, tied up with the pearls of his crown resembling a crescent and illuminated with the purest water of Ganga, which confers ten million beauties which head of matted hair robs other radiant substances of their lustre by its many large, clear and beautiful jewels and bright *kesara* flowers on which play the black snakes. He subdued all his enemies and his colour was like gold, his fair body was always bent down with respect for the worship of all gods, Daityas, men and learned persons, and his fame is sung everywhere as derived from the performance of *Yagyas*.

His son Istovana Deva born from the chief of his queens, Dasu Devi, who loved him dearly, was a king of kings, rich, respectable and learned. His son Lalita Sura Deva was born of his wife Dhara Devi, who was much devoted to him, who was also a king of kings, wealthy, respected, intelligent and in all respects a hero. His son Bhúdeva Deva was born of his wife Láya Devi, who loved much her husband. He also was king of kings, a zealous worshipper of Brahma, an enemy of Budha Sravana, a lover of truth, rich, beautiful, learned, continually engaged in religious observances and a person near whom Káli could not approach: whose eyes were beautiful as blue lilies and quick, the palm of whose hands resembled young twigs whose ears were frequently troubled by the sound of jewels of the crowns of Rájas who bowed before him and whose great weapon destroyed darkness, whose feet resembled the colour of gold, who granted pensions to his favourite attendants. He * * * * * * *

Four of the copper-plate grants are preserved in the temple of Pandukeswar near Badrináth, and of these two contain the fifth, sixth and seventh names of the Bágeswar inscription. The first of these two records the grant in the 21st year of the *Vijaya-rájya*, or 'realm of victory,' of certain villages in Gorunna Sári to Náráyana Bhattáraka by Lalitesvara Deva[1] at the instigation of his queen Sáma Devi. The civil minister was Vijaka and the minister of war was Aryyata and the writer Ganga Bhadra. The second of the two plates is dated in the 22nd year of the same era and records a similar grant to the same personage, Náráyana Bhattáraka, 'who is revered by the scholarly men of Garuda-asrama.' The officials subscribing the grant are the same and the place intended is the village of Tapuban on the left bank of the Alaknanda above Joshimath, where there are still the remains of numerous temples and one of the places of pilgrimage connected with Badrináth. There are but three names mentioned in these two plates and these are :—

Pandukeswar plates.

Nimbarata and his queen Náthú Devi.
|
Ishtagana Deva and his queen Desa (Vega) Devi.
|
Lalitasúra Deva and his queen Sáma Devi.

Both these grants are dated from Kárttikeyapura.

Two other plates from Pandukeswar introduce us to a separate series of names intimately connected with the last which are further confirmed by a similar grant made by the same princes to the temple of Báleswar in eastern Kumaon. The first of the plates of this new list is dated from Kárttikeyapura in the 5th year of the *pravarddhamána Vijaya-rájya*, Samvat 5. It is addressed to the officials of the Esála district by Desata Deva and records the grant to Vijayesvara of the village of Yamuna in that district. This plate gives the names of Salonáditya and his queen Sinhavali[2] Devi followed by their son Ichchata Deva and his queen Sindhu Devi, whose son was Desata Deva. The record was subscribed by the chief civil officer, Bhatta Hari Sarmma; by the chief military officer, Nandáditya, and by the scribe Bhadra, and is now deposited in the Báleswar temple. The next plate is from Pandukeswar and is

Second series of Rajas.

[1] The reading may be Lalitasúra Deva.

[2] This name may be read Sindhavali.

also dated from Kárttikeyapura in the 25th year of a similar era. It is addressed to the officials in the district of Tanganapura and records the grant to the temple of Badari by Padmata Deva, son of the Desata Deva of the Báleswar plate of four villages situated in Drumati in the district of Tanganapura. The names of the three princes of the previous plate are given with the addition of the name Padmalla Devi as the name of the queen of Desata Deva. The officials concerned were in the civil department, Bhatta Dhana; in the military department, Náráyana Datta; and the writer was Nanda Bhadra. The plate is now deposited in the temple of Pandukeswar near Badrináth.

The third record of this dynasty is dated from the city of Subhikshapura in the fourth year of the *Vijaya-rájya*. The donor in this case is Subhikshaŕája Deva, son of Padmata Deva, who addresses the officials in the districts of Tanganapura and Antaránga to note the grant of the village of Vidimalaka and other parcels of land to Náráyana Bhattáraka and the village of Ratnapalli on the north of the Ganges to Brahmeswara Bhattáraka. The subscribers to the deed were Kamalá the civil justiciary, Iswaridatta in command of the army, and Nanda Bhadra the writer. The names from the three plates are as follows :—

1. Salonáditya and his queen Sinhavali Devi.
2. Ichchhata Deva and his queen Sindhú Devi.
3. Desata Deva and his queen Padmalla Devi.
4. Padmata Deva and his queen Isála Devi.
5. Subhikshaŕája Deva.

There is little doubt that the year used by each of these princes is the year of his own reign, for we have the inscription of Desata Deva in the year 5, that of his son Padmata Deva in the year 25, and that of his grandson Subhikshaŕája Deva in the year 4 of the rising realm of victory; we have therefore to look elsewhere for some clue to the date of these princes.

Facsimile of one of the plates.

Through the kindness of Sir Henry Ramsay one of the Pandukeswar plates was sent to me by the Rawal of Badrináth, and a facsimile obtained by photozincography from the original is given here as well as a transliteration made under the supervision of Dr. Rajendralala Mitra,

C.I.E. A rough translation[1] of the entire five plates was also made through the latter gentleman, so that so far as these records are concerned we have full materials for the discussion of their date. The diction, style and form of all five is the same, showing that they all belong to the same period, the variations other than those in the description of the lands given away being of little importance. We have, moreover, in the records of the Pála rajas of Bengal a grant of similar diction and import which will aid us in arriving at a conclusion in regard to the date of our Kumaon rajas and which, if not completely decisive of the question, will at least be the nearest approach to the truth that we can hope for. We shall now give a facsimile, transliteration and translation of one of the Kumaon plates.

Transcript of an inscription from Pándukeśvar near Badarináth.

(१) स्वस्ति श्रीमत्कार्त्तिकेयपुरात्सकलामरदितितनुजमनुजविभु-
भक्तिभावभरभारानमितामितोन्नमाङ्गसङ्गिविकटमुकुटकिरीट-
विटङ्ककोटिकोटिशोलोकता—

(२) नाना(ताता)यकप्रदीपदीपदीधितिपानमदरक्तचरणकमलामल-
विपुलबहुलकिरणकेशरासारसारिताशेषविशेषमोषिघनतमस्ते-
जससस्वर्धुनीधौतजटाजू—

(३) टस्य भगवतो धूर्ज्जटेः प्रसादान्निजभुजोपार्ज्जितोर्ज्जित्यनि-
र्ज्जितरिपुतिमिरलब्धोदयप्रकाशदयादाक्षिण्यसत्यसत्त्ववशील-
शौचशौर्यौदार्यगाम्भीर्यमर्यादार्यवृत्ताश्चर्य—

(४) कार्यवर्यादिगुणगणालंकृतशरीरः महासुकृतिसन्तानबीजाव-
तारः कृतयुगागममूपाललालितकीर्त्तिः नन्दाभगवतीचरणकम-
लकमलासनाथमूर्त्तिः श्रीमिम्बरस्तस्यत—

(५) नयस्तत्पादानुध्यातो राज्ञीमहादेवीश्रीनाथूदेवीतस्यामुत्पन्नः-
परम माहेश्वरः परमब्रह्मण्यः शितकृपाणधारोत्कृतमत्तेभकु-
म्भाकृष्टोत्कृष्टमुक्तावलीयशःपताका—

[1] The translation has been kindly revised through Dr. Mitra, but I am alone responsible for the translation and collation of the names of the officials and the comparison with other inscriptions.

Photozincograph of the PANDUKESWAR PLATE, supplied for the N. W. P. Gazetteer, by E. T. Atkinson Esq.

(६) च्छायचन्द्रिकापहसिततारागणः परमभट्टारकमहाराजाधिराजपरमेश्वरश्रीमदिष्टगणदेवस्तस्य पुत्रस्तत्पादानुध्यातो राज्ञीमहादेवीश्रीवेगदेवीतस्यामुत्पन्नःपरममा—

(७) हेश्वरः परमब्रह्मण्यः कलिकलङ्कपङ्कातङ्कमग्नधरण्युद्धारधारितधौरेयवरवराहचरितः सहजमतिविभवविभुविभूतिस्थगितारातिचक्र प्रतापदहनः। अतिवैभव संहारारम्भसं—

(८) भृतभीमभ्रुकुटिकुटिलकेसरिसटाभीतभीतारातीभकलभभरः अरुणारुणकृपाणवाणगुणप्राणगणहठाकृष्टोत्कृष्टसलीलजयलक्ष्मीप्रथमसमालिङ्गनावलो—

(९) कनवलक्ष्यसखेदसुरसुन्दरीविधूतकरस्खलद्वलयकुसुमप्रकरप्रकीर्णावतंससम्बर्द्धितकीर्त्तिबीजः पृथुरिव दोर्द्दण्डसाधितधनुर्म्मण्डलबलावष्टम्भवश—

(१०) वशीकृतगोपालनानिश्चलीकृतधराधरेन्द्रः परमभट्टारकमहाराजाधिराजपरमेश्वरश्रीमल्ललितशूरदेवकुशली अस्मिन्नेव श्रीमत्कार्त्तिकेयपुरविषये समु—

(११) पगतान् सर्व्वानवनियोगस्थान्राजराजतकराजपुत्रासृष्टामात्यसामन्तमहासामन्तठक्कुरमहामनुष्यमहाकर्तृकृतिकमहाप्रतीहारमहादण्डनायकमहाराजप्रमातारश—

(१२) रभङ्गकुमारामात्यापरिकटुस्साध्यासाधनिकदशापराधिकचौरोद्धरणिकशौल्किकशौल्मिकतदायुक्तकविनियुक्तकपट्टाकापचारिकाशेषभङ्गाधिकृतहरत्यश्वोष्ट्र—

(१३) बलव्यापृतकभूतप्रेषणिकदण्डकदण्डपाशिकगमागमिशार्द्धकाभित्वरमाणकराजस्थानीयविषयपतिभोगपतिनरपत्यश्वपति+ण्डरक्षप्रतिशूरि—

(१४) कस्यानाधिकृतवर्त्मपालकौट्टपालघट्टपालद्वेच पालप्रान्तपाल-किशोरवरवागोमहिष्यधिकृतभट्टमहत्तमाभीरवणिक्श्रेष्ठिपुरो-गास्तथादशप्रकृ—

(१५) त्यधिष्ठानीयान्खषकिरातद्रविड़कलिङ्गशोरहूणोड्रमेदान्ध्रचा-ण्डालपर्य्यन्तान्सर्व्वसम्बसान्समस्तजनपदान्भटाचटसेवकादीन न्यांश्च कीर्त्तितानकीर्त्तितानस्म—

(१६) त्यादपद्मोपजीविनः प्रतिवासिनश्च ब्राह्मणोत्तरान् यथार्हं मत्तयतिबोधयति समाज्ञापयत्यस्तु तेस्माद्विदितमुपरिनिर्दि-ष्टविषये गोरुन्नसायां प्रतिबद्धखषियाक—

(१७) परिभुज्यमानपल्लिका तथा पणिभूति कायां प्रतिबद्धगुग्गुलपरि-भुज्यमानपल्लिकाद्वयं एते मयामातापितोरात्मनश्च पुण्ययशोभिवृद्धयेपवनविघट्टिता—

(१८) श्वत्थपत्रवच्चलतरङ्गजीवलोकमवलोक्य जलबुद्बुदाकारमसारं वायुर्दृष्ट्वागजकलभकर्णाग्रचपलताज्वालत्य त्वापरलोकनिःश्रेय-सार्थसंसारार्णवोत्तरणार्थञ्च—

(१९) पुण्येहनि उत्तरायणसङ्क्रान्तौ गन्धपुष्पधूपदीपोपलेपननैवेद्य-बलिचरुनृत्यगेयवाद्यस त्त्वादिप्रवर्त्तनाय खण्डस्फुटितसंस्कर-णाय अभिनवकर्म्मकरणा—

(२०) य च भृत्यपदमूलभरणाय च गोरुन्नसायां महादेवीश्रीसाम-देव्यास्वयंकारायितभगवते श्रीनारायणभट्टारकाय शासनदा-नेन प्रतिपादिताः प्रकृतिपरिहारयुक्तः—

(२१) प्रचाटाभटाप्रवेशः अकिञ्चित्प्रग्राह्याः अनाच्छेद्य आचन्द्रार्क्क-क्षितिस्थितिसमकालिकः विषयादुद्धृतपिण्डास्यसीमागोचर-पर्यन्तस्य वृक्षारामो हृदप्रस्रवणोपे—

(२२) तदेवब्राह्मणभुक्तभुज्यमानवर्जिताः यतस्सुखं पारंपर्येण परि-
भुञ्जतश्चास्योपरिनिर्दिष्टैरन्यतरैर्व्वा धरणविधारणपरिपन्थि-
जनादिकोपद्रवो मनागपि न कर्त्त—

(२३) व्यो नान्यथा ···· महान्द्रोहःस्यादितिप्रवर्द्धमानविजयराज्य-
सम्वत्सरएकविंशतिमेसम्वत्२१ माघवदि ३ ···· महादाना-
क्षयपटलाधिकृतश्रीपीजकः। लि—

(२४) खितमिदं महासन्धिविग्रहाक्षपटलाधिकृतश्रीमदायटाववना-
टङ्कोत्कीर्णो श्रीगङ्गभद्रेण। बहुभिर्व्वसुधा भुक्ता राजभिः सगरा-
दिभिः। यस्य यस्य यदा भूमिस्त—

(२५) स्य तस्य तदा फलं। सर्व्वानेतान् भाविनः पार्थिवेन्द्रान्-
भूयो भूयो याचते रामभद्रः। सामान्योऽयं धर्म्मसेतुर्नृपाणां-
कलिकाल पालनीयोभवद्भिः। स्वदत्तां परदत्तां वा यो ह—

(२६) रेत वसुन्धरां। षष्टिम्वर्षसहस्राणि श्वविष्ठा जायते कृमिः।
भूमेर्दाता याति लोके सुराणां हंसैर्युक्तं यानमारुह्य दिव्यं-
लोहे कुम्भेतैलपूर्णे सुतप्ते। भूमेर्हं—

(२७) र्त्ता पच्यते कालदूतैः। षष्टिवर्ष सहस्राणि स्वर्गे तिष्ठति भूमिदः।
आच्छेत्ताचानुमन्ता च तान्येव नरके वसेत्॥ गामेकाञ्च सुवर्णञ्च
भूमेरप्येकमङ्गलं। हृत्वा नरकमायाति यावदाहूतिसंप्लवं। यानीह
दत्तानिपुरा नरेन्द्रैर्दानानि धर्म्मार्थयशस्कराणि। निर्म्माल्य-
वन्तिप्रतिमानि तानि को नाम साधुः पुनरादद्दीत। — — —

(२८) भ्रममिदं समुदाहरद्भिरन्यैश्च दानमिदमभ्यनुमोदनीयं ल-
क्ष्म्यास्तडित्सलिलवुद्बुदचञ्चलायाः। दानं फलं परयशः परि-
पालनञ्च॥ इति कमलदल—

(२९) विन्दुलोलमिदमनुचिन्त्य मनुष्यजीवितञ्च। सकलमिदमुदा-
हृतञ्चबुद्ध्वा न हि पुरुषैः परकीर्त्तयो विलोप्याः॥

Legend on the Seal.

श्रीमिम्बरस्तत्पादानुध्यातः ।
श्रीमदिष्टगणदेवः तत्पादानुध्यातः ।
श्रीमल्ललितशूरदेवः क्षितीशः ।

PANDUKESWAR.

Be it auspicious: from the prosperous city of Kárttikeya. By the grace of the divine Siva, whose matted hairs are washed by the celestial stream of Ganga, whose lotus feet profusely shed an abundant shower of pure and resplendent pollen, the brightness of which dispels the endless varieties of the thick gloom (of ignorance), and which flushes with a vinous rubescence by imbibing the beams emitted from the lamps of the several chief gems of the terrific coronets, diadems and helmets of the lords of all the immortals, Daityas and human beings whose heads bow down under the heavy burden of devotion, did the prosperous King Nimbarana gain the glory of the rising sun by conquering the mist of his foes. His person was adorned with an assemblage of the qualities of clemency and dexterity, truthfulness and good manners, purity, heroism, munificence, graveness, respectability, Aryan conduct and wonderful and honorable acts, whereby he became an incarnation of the seed of an offspring of great virtues, and fond of a fame worthy of the rulers of the earth in the returning golden age, and resembling in his complexion the lotus feet of the goddess Nanda and of the lotus-seated Brahma. To him was born a son, a meditator on his feet, of his queen and great lady, the fortunate Náthu Devi. He was a devout worshipper of Siva, and devoted to the supreme Brahm. He, with the edge of a sharp sword, slew furious elephants, whose frontal globes scattered a series of excellent pearls, while the lustre of his lifted banner laughed to scorn the array of the stars. This was the most venerable king of kings and lord paramount, the prosperous Ishtagana Deva.

His son meditating on his feet, and begotten on his queen and great lady, the fortunate Vega Devi, is the most venerable and great king of kings and sovereign lord, the prosperous Lalita Sura Deva, the auspicious, who is a devout worshipper of Mahesa, and devoted to the supreme Brahm (or exceedingly liberal to Brahm). He has acted the part of the great boar encumbered with the weight of the earth by delivering it from drowning under the dread of the dirt of the sinful age of Káli. He possessed an exuberance of natural genius and super-human prowess, whereby his blazing valour withstood the hosts of his encompassing enemies. Being ever ready in his preparations for war, by the vast resources of his wealth, he, by the terrific frowns of his brows, bore an intimidation to his enemies, as the curling mane of the lion affrights the cub of the elephant. He, by his restless sword and arrows in battle, has slain many a soul (in warfare), and violently seized on the goddess of prosperity in victory, as if he had dragged her from underneath the waters (of the deep). The damsels of heaven viewing this reverse of fortune with affliction at his embraces to her, dropped down the bracelets from their trembling wrists, which, strewn like wreaths of flowers, formed his head-dress (as if it blossomed), to mature the seeds of his glory. Like Prithu his arms were

inured to the bending of the bow, by the force of which he subdued and protected the world and established its monarchs.

All the people assembled in the fortunate city of Kárttikeyapura,[1] all—

I.	II.	III.	IV.	V.	VI.	
...	1	1	1	1	...	*Niyogasthán* : those employed in public affairs.
...	2	2	2	2	...	*Rája* : kings.
1	3	3	3	3	1	*Rájanyaka* : princes (*cf.* title Rainka in Nepál and Doti).
2	4	4	4	4	2	*Rájáputra* : sons of Rajas (or Rajpúts ?).
3	5	5	5	5	3	*Rájamátya* : counsellors of the Raja.
...	6	6	6	6	...	*Sámanta* : neighbouring tributary princes.
7	7	7	7	7	6	*Mahásámanta* : commander-in-chief.
4	10	10	8	8	9	*Mahákartákrittika* : chief investigator of all works.
5	12	12	9	9	11	*Mahadandanáyaka:* chief officer of punishment.
6	11	11	10	10	8	*Mahápratihára* : chief warder.
...	...	...	11	11	...	*Mahásámantádhipati* : chief of the feudatory princes.
...	13	13	12	...	...	*Mahárája* : chief Rajas.
10	14	14	13	...	...	*Pramátára* : keeper of the records of measurements, surveyors.
11	15	15	14	...	...	*Sarabhanga* : archers (a local mountain tribe?).
9	16	16	15	...	12	*Kumárámátya* ; counsellor of the heir-apparent.
13	17	17	16	...	13	*Udadhika* : superintendents.
8	18	18	17	...	10	*Duhsádhyasádhanika* : overcomers of difficulties.
14	19	19	18	...	14	*Doshaparádhika* : investigators of crimes.
15	20	20	19	12	15	*Chouraddharanika* : thief-catchers.
18	21	21	20	13	18	*Saulkika* : superintendents of octroi.
19	22	22	21	14	19	*Gaulmika* : soldiers.
24	23	23	22	15	24	*Tadáyuktaka* : former officials.
25	24	24	23	16	25	*Viniyuktaka* : officials on detached duty.
...	25	25	24	17	...	*Pattaká* : engravers (?).
...	26	26	25	18	...	*Pachárika* : draught-players (?) : or *Pattakopachárika*, wardrobe-keepers.
...	27	27	26	19	...	*Saudhabhangádhikrita* : chief architects.
26	28	28	27	20	26	*Hastyaśvoshtravala* : keeper of elephants, horses and camels.
...	29	29	28	21	...	*Vyápritaka* : secretaries or ambassadors.
28	30	30	29	22	...	*Hútapreshanika* : chamberlains or messengers.
16	31	31	30	23	16	*Dándika* : mace-bearers.
17	32	32	31	24	17	*Dándapásika* : keeper of the instruments of punishment.
...	...	...	32	25	...	*Vishaya-vyápritaka* : district secretaries.

[1] The titles of the officials to whom the grant is addressed follows here and the order of the names in each grant is given in the column to the left. I = the Mungir plate : II = the Pandukeswar plate of Lalitasúra forming a portion of the text translated here : III = Lalitasúrá's second plate : IV = Padma Devá's plate ; V = Subhiksharájá's plate and VI = the Bhágalpur plate.

I.	II.	III.	IV.	V.	VI.	
29	33	33	33	26	29	*Gamágamika* : messengers.
...	34	34	34	27	...	*Khá lgika* : swordsmen.
30	35	35	35	28	30	*Abhitvaramánaka* : swift messengers (*manika*, miner ?).
...	36	36	36	29	...	*Rájasthániya* : officers of the royal household.
31	37	37	37	30	31	*Vishayapati* : district officers.
...	38	38	38	31	...	*Bhogapati* : provincial governors.
23	...	...	39	32	23	*Khandapati* : chiefs of wards in cities (*mahalladárs*).
32	39	39	40	33	30	*Tarapati* : chiefs of the ferries.
...	40	40	41	34	...	*Asvapati* : commanders of cavalry.
...	41	41	42	35	...	*Khandarakshasthánadhipati* : chief of the frontier posts.
...	42	42	43	36	...	*Vartmapálaka* : road guards.
22	43	43	44	37	22	*Koshapála* : treasurers or *kottapála* (*kotwáls*).
...	44	44	45	38	...	*Ghattapála* : guards of passes (*Ghátwáls*).
...	45	45	46	39	20	*Kshetrapála* : guards of fields.
21	46	46	47	40	21	*Prantapála* . guards of boundaries.
...	8	8	48	41	...	*Thakkurá* : the (khasiya) khsatriya tribe.
...	9	9	49	42	...	*Mahámanushya* : men of importance (village-headmen ; *cf. bhalmanush*).
27	47	47	50	43	27	*Kisoravadava go mahishyadhikrita* : keepers of colts, cows and buffaloes.
...	48	48	51	44	...	*Bhattamahottama* : most learned men.
...	49	49	52	45	...	*Abhira* : Cowherds (*ahirs*).
..	50	50	53	46	...	*Banik* : merchants (*baniyas*).
...	51	51	54	47	...	*Sreshtiparogán* : chiefs of city, guilds ; (*chaudhris*).
...	52	52	55	48	...	*Sáshtádasaprakrityadhishthániyán* : superintendents of the eighteen departments.

together with Khasas, Draviras, Kalingas, Gauras, Odhras, Andhras down to Chándálas, all peoples and places, all soldiers, slaves, and servants and others, whether mentioned here or not, who depend upon our royal feet, know ye, mark ye this Brahmanottara.

Be it known to you that the village situated in Gorunna Sári within the aforementioned estate, which is now in the possession of Khashiaka, as also that in the possession of Gugula, and situate in the Palli of Bhutiká, these two villages are given by me by means of the grant of this edict, ordered to be made at Gorunna Sári by the great queen Sama Devi herself to the reverend Nárayana Bhattáraka, for adding to the merit and reputation of my parents and of myself, by observing the living world to be as unsteady as the leaves of the *ficus religiosa*, and the billows moved by the breeze and by seeing this life to be as vain and void of substance as the form of a bubble of water, as also by knowing the instability of fortune, likened to the unsteadiness of the tips of a young elephant's ears, for the sake of (obtaining) beatitude in the next world, and salvation in the ocean of this, on this meritorious day of the winter solstice, accompanied with diffusion of fragrant flowers, incense, lights and ointments, with offerings, sacrifices,

oblations, dancing, singing and music for the performance of the feast, and purification (correction) of all omissions and errors in the new act, as also for expediting the feet of our servants, and further conferring the right to debar the ingress of all government officers therein, also exemption from every duty and a perpetuity contemporaneous with the continuance of the sun, moon, and earth. They are to remain as parcels detached from the estate as far as their visible boundaries, with all the trees, arbours, springs, and cataracts contained in them, and free from all past and present usufructs, of gods and Brahmans therein. The possessor thereof having full rights for ever and ever as defined herein, must not at all be annoyed by seizure, resumption, robbery, or any other disturbance, under a heavy penalty attendant upon any violation of this commandment. In the year of the rising kingdom of victory (*pravarddhamána vijayarájya*) twenty-one Samvat 21, the third day of the waning moon of Maglia. The deputies in this affair are the chief justice of lawsuits concerning gifts and grants, named Sri Vijaka, the writer hereof, and the chief arbiter of cases relating to peace and war, Sri Aryatta, by whose order this plate is inscribed by Ganga Bhadra.

(*Verses.*)

1. "This earth has been in the possession of several kings, commencing with Sagara. Whoever becomes the owner of land at any time, he then reaps the fruits thereof

2. Ráma Bhadra hath required of all future princes of the earth that they preserve from time to time the bridge of their beneficence.

3. The donor of lands ascends to the abode of the gods, mounting on a heavenly car yoked with hansas (swans). But the resumer of lands is boiled in an iron caldron filled with hot oil by the delegates of the regent of death.

4. Whoever resumes lands given either by himself or others may he be born as a worm to remain in filth for full sixty thousand years.

5. The donor of lands dwells in heaven for sixty thousand years, but the resumer and his counselior remain in hell for the same number of years.

6. The appropriator of a village, a gold coin, or one inch of ground, enters into hell to remain there until the return of the offerings.

7. What man is there who can deny gifts made by former lords of men for the sake of piety and renown, and attested by the articles of sacred offerings.

8. From this example of our caution against resumption by our posterity, let others adopt the same in regard to their own donations, and know that gifts and gain of renown are the only benefits of prosperity which is as unsteady as a flash of lightning or a bubble of water.

9. Unsteady as the dewdrop on the lotus leaf, so fleeting is fortune, and so brief is human life. Considering these, and knowing the donor's name, no man should destroy the deeds of another's reputation."

The Kumaon and Pála tates.

I have not thought it necessary to reproduce here the Mungir inscription[1] of the Pála Raja, Deva Pála Deva or the Bhágalpur[2] inscription of the

[1] This plate, of which a copy is given in A.S. Res., I., 123, was translated by Mr. Wilkins in 1781. It was discovered amid the ruins of Mungir by Colonel Watson. [2] J. A. S. Ben., XLVII., i., 384.

Pála Raja Nárayana. The Mungir inscription calls Deva Pála a *saugata*. His genealogy is traced from Go Pála, whose son was Dharma Pála, of whom it is said :—"He went to extirpate the wicked and plant the good and happily his salvation was effected at the same time: for his servants visited Kedára and drank milk according to the law." Deva Pála succeeded and 'peaceably inherited the kingdom of his father as Bodhisattwa succeeded Sugata.' He also is said 'to have conquered the earth from the sources of the Ganges as far as the well-known bridge which was constructed by the enemy of Dusásya,' *i.e.*, from Garhwál to Cape Comorin. The characters in the five Kumaon plates are the same and belong to the earlier form of the *kutila* or 'bent' alphabet of which we have several examples from the eighth to the tenth century. A comparison with the form of the letters on the Mungir and Bhágalpur plates shows that they also belong to the same class. The tribal name of the writer is the same in all six records. In the plates of Lalitasúra Deva, the writer is Ganga Bhadra, in that of Desata Deva it is ** Bhadra ; in those of Padma Deva and Subhikshasárája Deva it is Nanda Bhadra and in the Pála plates we have Binda Bhadra on one and the Bhatta Gurava on another. In the Buddal Pála inscription the name is Binda Bhadra. The very remarkable list of officials common to all the plates has been analysed in the translation of the Kumaon plate. The coincidences in order and position in this respect cannot be accidental and clearly shows that all were derived from one common original in the family of the professional scribes whose tribal name was Bhadra. The form of dedication is the same in all and also the precatory verses attached to each grant. An examination of the names of the officials shows that it is improbable that all of them could not have existed in a small hill state, especially such as the keepers of camels and elephants and the commanders of cavalry. This portion of the form of the grant is clearly borrowed from that in use in a larger and more important state in the plains. Another point of resemblance is that both the hill grants and the Pála plates are dated from some unknown local era and in the hills clearly from the accession of the reigning monarch, a practice presumably also borrowed from the Bengal Rájas. The hill plates are still in possession of the representatives of the grantees and there is not the slightest reason for

believing them to be other than genuine; in fact not one of their present possessors can decypher a single line much less attempt a meaningless forgery of this nature.

Turning to the Pandukeswar plates we learn that Nimbarata Deva's reign was remarkable for some great contest with, we may suppose, a foreign foe. Nimbarata Deva himself is said to have vanquished his enemies as the rising sun dispels the mist, and his son Ishtagana Deva 'with the edge of his sword slew furious elephants.' If we accept this statement the elephant could hardly be used by one hill-tribe against another, so that the invader must have come from the plains and been met by the Katyúris at the passes into the hills, for within the hills themselves elephants could hardly be used. Lalitasúra Deva, however, is the prince who is most praised for his successes in war. Ever ready in his preparations for a campaign and aided by his vast wealth, he was found resistless and 'established the monarchs of the earth.' In the Pála inscriptions Go Pála is likened to Prithu as Lalitasúra is in his inscriptions. In the Buddal inscription of the minister Gurava Bhatta, the empire of Deva Pála is said to have extended from the Mahendra mountain to the Himálaya.

Of the second series of Kumaon plates those of Desata Deva and his son Padmata Deva are dated from Kárttikeyapura in the same manner as those of Lalitasúra Deva and that of Subhiksharája Deva are dated from Subhikshapura, most probably another name for Kárttikeyapura or a suburb thereof. They do not mention any Rája of the previous lists, but the character of the writing, the style and form, the name of the scribe, and the place from which they are dated is the same as in the former group. As these grants of Lalitasúra connect themselves by the names of the Rájas with the Bágeswar inscription from which they differ in form, this group must be considered as following those of Lalitasúra Deva, at no great distance of time. The two first records were written by the same scribe and all give a literally identical account of Salonáditya, ascribing to him many virtues and success in battle. All agree also in passing over his son Ichhata Deva with the simple record of his birth, and little more is said of his successor Desata Deva than that he and his mother were devout worshippers of Siva and Brahma and were exceedingly liberal to Brahmans and

the poor. Of Padmata Deva it is said that he was a devout Saiva and "acquired by the might of his arms unnumbered provinces on all sides, the owners of which coming to make him obeisance poured forth such incessant gifts of horses, elephants and jewels before him that they held in contempt the offerings made to Indra. He resembled Dadhichi and Chandragupta in his conduct and mastered the earth, stretching to its zone, the reservoir of the ocean." His son Subhikshardja Deva was a "Vaishnava, devoted to the supreme Brahma and a patron of those learned in the Shástras," besides being adorned with many virtues. We can glean little more from the descriptions in these grants beyond what is given above.

Localities.

With regard to the localities mentioned, the two grants of Lalitasúra Deva are addressed to the officials and others in the district of Kárttikeyapura. One is translated here and need not be further noticed. The second conveys a similar grant to the same person of Thapyala Sári in the possession of Indra Váka to provide for the necessities of the religious anchorites residing at Tapuban, a place on the right bank of the Dhauli above Joshimath, which will show that this village was still in the Kárttikeyapura district. The grant of Desata Deva is addressed to the officers in the Esála district and bestows the village of Yamuna in the possession of Náráyana Varmana on Víjayesvara. The grant of Padmata Deva is addressed to the officials of the district of Tanganapura and that of Subhikshardja Deva to the officials of the districts of Tanganapura and Antaránga. Tanganapura has already[1] been identified with the tract above the confluence of the Bhágirathi and Alaknanda and Antaránga with the country lying between those rivers. The first of these two bestows certain lands on the temple of Badarikásrama. There were four villages in Drumati in the possession of the Aditya family of Buddhachal together with fifteen shares (*bhága*) in Pangara also in Drumati, also the *vritti* of Ogala in Yoshi and another patch on the banks of the Gangápadi, an accretion to Sankrima, as well as the fields detached from Ulika. Also the land near the great banyan-tree in Kásthal village in Drumati and two *dronas* of land in the Randavaka village in Yoshi.

[1] Page 357.

In the grant of Subhiksharája Deva there is a long list of villages and lands conferred on two priests, and amongst them the following which are given so that hereafter possibly they may be identified :—

"Land in Vidimaláka belonging to Vachchhetaka : in Bhetha Sáryya : measuring eight *nális* : in Báriyál, measuring four *dronas* ; in Vanolika ; also an accretion from Kandayika to Sarana belonging to Subhattaka ; a piece called Satika ; also one called Yachchha Saddha, held by Gochittangaka ; Talla Sáta belonging to Vihándaka ; Kshíra belonging to Veha Váka ; Gangaraka belonging to Soshi Jiváka ; Pettaka ; Kathasila ; Nyáyapattáka ; Bandiwala belonging to the Adityas ; Ichhawala, Vihalaka and Maharjiyaka ; Khorakhottanka belonging to Siláditya ; in Harshapura, land formerly belonging to Parbabhána Ungaka now in the estate of Durga Bhatta ; also new land in Varoshika belonging to the Sittakas, Ussoka, Vijjata, Dujjana, Attanga, Váchataka and Varáha ; Jatipátaka in Ijjara ; Samijjíya ; Gododha in Pairi belonging to the sons of Satraka ; Ghasmengaka in Yoshika ; Sihára ; Balívardda and Sila ; Ihanga ; Rullatha ; Tiringa ; Kattanasila ; Gondodárika ; Yuga ; Karkatatháta ; Dálimúlaka belonging to Ghara Nága ; Dáraka belonging to Sirwála ; Karkaráta belonging to the Vijáyánas ; Chidhárika belonging to the Katusthikas ; Randavaka ; Loharasa belonging to Tungáditya ; also land in Yoshika ; Ratnapalli near Sadáyika with the following limits : west of the boundary of Sankata, east of Andáriganika, north of the Ganga ; and south of the village of Tamehaka belonging to the sons of Senáyika." The donees are Náráyana and Brahmeswara, who appear to have been the officiating priests of the temple of Durga Devi. The tribal names Váka, Jiváka, Aditya, Vijáyána and Katusthi do not appear to occur now, but we have Maniváka as the name of one of the sons of the ruler of Saka-dwípa and in the Bharhat sculptures.

The countries enumerated as subject to the Rájas who caused the grants to be inscribed are worthy of notice here. We shall accordingly place the statements of the six inscriptions together for comparison—

Rája's name.	Date of grant.	Tribes to whom it is addressed.
1. Lalitasúra Deva ...	21	Khasas, Draviras, Kalingas, Gauras, Odras, Andhras, Chándálas.
2. Ditto ...	22	The same with the addition of Kirátas, Húnas and Medas.
3. Desata Deva ...	5	Khasas, Kalingas, Húnas, Gauras, Medas, Andhras, Chándálas.
4. Padma Deva (son of Desata).	25	Same as No. 2, omitting Andhras.
5. Subhiksharája Dvea (son of Padma)	4	Same as No. 2.
6. Deva Pála Deva ...	33	Gauras, Málavas, Khasas, Húnas, Kalingas, Karnátas, Lásátas, Bhotas, Medás, Andhrakas, Chándálas.

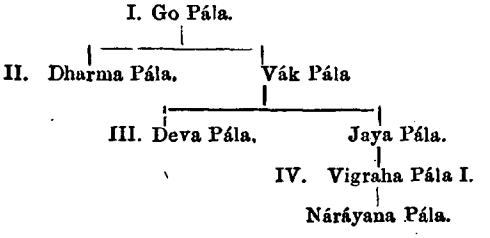
The Mungir plate contains four names not given in the Kumaon plates, those of the Málavas, Karnátas, Lásátas, and Bhotas. We have already seen that the Málavas were a Panjáb tribe who after several changes of abode eventually gave their name to the part of Central India now called Malwa. The Karnátas were a southern tribe who have also left their name behind them in the Carnatic. The Lásátas and Bhotas are spoken of together and quite correctly. Lhása was made the capital of the first really independent Tibetan State in or about 640 A.D., and the Bhotas represent the Chi-ang and wandering tribes not subject to Lhása and indeed the common people of Tibet generally. There was constant intercourse between the Buddhist people of Tibet and their fellow Buddhists in Magadha. The Mungir inscription shows that Deva Pála was a Buddhist, though one of a very liberal mind. The names of Lhása and Bhota have properly been omitted from the Kumaon inscriptions, as Kumaon was too near those countries to permit of their submission being recorded as a matter of fact. The insertion, too, of the names Dravira in southern India, Kalinga on the Coromandel coast, Odra or Orissa, Gaura in Bengal and Meda in the Panjáb or indeed of any other names than those of the Khasas and Kirátas must simply be due to the existence of these names in the original form from which the Bhadras of Kumaon copied the terms of the grant.

Bhágalpur plate.

In a grant of Náráyana Pála lately discovered at Bhágalpur and translated by Dr. Mitra[1] we have a second record quite as full as that of the Mungir plate and some important rectifications of the genealogy. "The record opens with a stanza in praise of Go Pála, who was a devout Buddhist and a follower of Sugata. His son and immediate successor was Dharma Pála. The latter had a brother named Vák Pála, who lived under his sway. On his death Deva Pála, the eldest son of his brother, succeeded him. Vák Pála had a second son named Jaya Pála, who is said to have brought Orissa and Allahabad under his brother's government. On the death of Deva Pála, Vigraha Pála, the son of Jaya Pála, came to the throne. Vigraha Pála was succeeded by his son Náráyana Pála, the donor of the grant." We have

[1] J. A. S. Ben., XLVII., i., 384.

accordingly to revise the indications afforded by the Mungir plate thus :—



The donee's name was Siva Bhattáraka, a name found also in the Ballabhi grants, and the record was composed by Bhatta Gurava,[1] the minister who erected the Buddal pillar. The latter is a record of the family of this minister and contains the names of Panchal and Gaya and of the son of Garga called Darbhapáni, of whom it is recorded that by his policy "the great prince Deva Pála made the earth tributary from the father of Reva, whose piles of rock are moist with juice from the heads of lascivious elephants, to the father of Gauri, whose white mountains are brightened with beams from the morn of Isvara and as far as the two oceans whose waters are red with the rising and with the setting sun." Here Deva Pála is credited with the conquest of the country from the Mahendra mountain which contains the source of the Reva to the Himavat who was father of Gauri. To Darbhapáni was born Someswar and to him Kedára Misra, trusting to whose wisdom, "the rája of Gaur for a long time enjoyed the country of the eradicated race of Utkala (Orissa) of the Húnas of humbled pride, of the kings of Dravira and Gujara whose glory was reduced and the universal sea girt throne" * * "To him, emblem of Vrihaspati and to his religious rites, the prince Sura Pála, who was a second Indra and whose soldiers were fond of wounds, went repeatedly." Kedára-Misara had a son Gurava Misra, who was greatly respected by the prince Nárâyana Pála and who caused the record to be inscribed by Binda Bhadra.[2] We may also note that the donee in Deva Pála's inscription was a Misra. In the *Aín-i-Akbari*, Abul Fazl

[1] The Guravas in western India enjoy a monopoly of the service in Saiva temples and have a right to the offerings made : Ind. Ant., III., 77. [2] As. Res., I., 133 : this is translated by Mr. C. Wilkins, with notes by Sir W. Jones. The inscription was found on a stone pillar near Buddal on the boundary of the Dinájpur and Boghra districts in Lower Bengal, about forty miles south-east of Dinájpur, in 1780.

gives[1] the names of seven so-called Vaidya rájas of Bengal ending with Náráyana, whose successor Lakshmaniya was expelled by Muhammad Bakhtiyár Khilji in 1203 A.D. Before these Vaidyas occur the names of ten Pála rájas, all of which except the first three are wanting in their proper places in the inscriptions. The length of many of the reigns also is so absurdly prolonged as to render this tradition utterly worthless.

Tibetan records.

Vassilief in his work on 'Buddhism' states,[2] on the authority of Táránáth, that the origin of the Pálas was in this wise. On the extinction of the Chandra dynasty as a ruling power in eastern India; in Orissa and Bengal and in the other five provinces of the east, each Kshatriya, Brahman and merchant constituted himself king of his surroundings, but there was no king ruling the country. The wife of one of the late kings assassinated by night every one of those who had been chosen to be kings, but after a certain number of years Go Pála, who had been elected for a time, delivered himself from her and was made king for life. He began to reign in Bengal, but afterwards reduced Magadha under his power. He built the Nálandara temple not far from Otantapura and reigned forty-five years. Sri Harsha was at this time reigning in Kashmír. Go Pála was succeeded by his son Deva Pála, who greatly extended his kingdom and re-established the Buddhist religion. He reigned forty-eight years and was succeeded by his son Rasa Pála, by a daughter of Vibharata, king of Gajana. After twelve years he was succeeded by Dharma Pála, who reigned sixty-four years and was a contemporary of Tissong *l* de-*b* tszan.[3] The successors were—

Basurakshita, son-in-law of Dharma Pála, reigned eight years.
Vaná Pála, son of Dharma Pála.
Mahi Pála, reigned fifty-two years, comtemporary of Khri-ral.
Mahá Pála, son of Mahi Pála, reigned four years.
Sámu Pála, son-in-law of Mahá Pála, reigned twelve years.
Sreshta, eldest son of Mahá Pála, reigned three years.
Chánaka, maternal uncle of Sreshta, reigned twenty-nine years.
Bheya Pála, nephew of Chánaka, reigned thirty-two years.

[1] Gladwin, II., 21. The following names with the length of reigns are given:—Bhupála, 55: Dharpála, 95: Deopála, 83: Bhupatipála, 70: Dhanpatpála, 45: Bijjenpála, 75: Jayapála, 98: Rajapála, 98: Bhogpála (brother of Rajapála), 5: Jagadpála (son of Bhogpála), 74. Bhupála may be identified with Go Pála; Dhirpála or more correctly Dharpála with Dharmapála and Deopála with Devapála.
[2] 'Le Bouddisme,' LaComme's translation of Vassilief, p. 54: Arch. Rep. III., 133: Ind. Ant. IV., 366. [3] Khrisong, 728-755 A.D.

Neya Pála, son of Bheya Pála, reigned thirty-five years.
Amar Pála, son of Neya Pála, reigned thirteen years.
Regency for eight years.
Hasti Pála, son of Amra Pála, reigned fifteen years.
Kshánti Pála, maternal brother of Hasti Pála, reigned seventeen years.
Ráma Pála, son of Hasti Pála, reigned forty-six years.

Then came Lava Sena and expelled the Pálas. Most of these names are hopelessly out of accord with existing inscriptions.

In 1806, a grant inscribed on a copper-plate was found at Amgáchhi[1] in parganah Sultánpur in the Dinájpur district, a place about fourteen miles from Buddal. It contained the name of Vigraha Pála Deva and some others and was dated in sanvat 12. In an inscription from Sárnáth, however, we have a dated record clearly belonging to the Pálas. It was discovered on a figure of Buddha near Benares by Mr. Jonathan Duncan in 1794 and bears the date samvat 1083, equivalent to 1026 A.D. The writing has been translated by Colonel Wilford and again by General Cunningham, whose version[2] is as follows:—

Sárnáth inscription.

"Adoration to Buddha. Having worshipped the lotus foot of Sri Dhamarási, sprung from the lake of Varánasi, and having for its moss the hairs of prostrate kings, the fortunate Mahipála, king of Gaura, caused to be built in Kási hundreds of monuments, such as Isána and Chitraghanta. The fortunate Sthirapála and his younger brother, the fortunate Basanta-pála, have renewed religion completely in all its parts and have raised a tower (*saila*) with an inner chamber (*garbha-kuti*) and eight large niches, samvat 1083, the 11th day of Pausha."

As now translated the date should be assigned to the buildings of Sthira Pála and his brother Basanta Pála, who were contemporaries of Mahi Pála, who according to the Amgáchhi plate was himself a successor of Vigraha Pála II. General Cunningham's new reading and translation will set at rest the discussion regarding the names and dates raised on Wilford's imperfect transcript.[3] In another inscription[4] on the base of a statue of Buddha the ascetic found by General Cunningham in Buddha Gaya we have the name Mahipála and in the second line containing the date the following formula:—

[1] As. Res., IX., 442; Colebrooke's Essays, II., 279: J. A. S. Ben. XLVII., i., 387. [2] Arch. Rep., III., 121. [3] As. Res. V., 132: J. A. S. Ben., IV., 211. Lassen makes the successors of Nárayana Pála rulers of Kanauj and connects with them the name Yasah Pála found in an inscription dated in the year 1036 A.D.: see Colebrooke Misc. Ess., II, 277: J. A. S. Ben., V., 731. [4] Arch. Rep., III., 122.

*"Parama bhattáraka, parama saugata, Sriman Mahipála Deva pravarddhamána vijaya ráje (rájye?) * * dasame samvatsare,"*

which General Cunningham translates:—"In the 10th year of the prosperous and victorious reign of the paramount king, the eminent Buddhist, the fortunate Mahipála Deva." Here we have the exact formula used in the dates of the Pandukeswar plates and which we have translated "in the year of the rising realm of victory." We have other inscriptions of Go Pála, Vigraha Pála, Mahi Pála, Naya Pála, Ráma Pála Deva, Mahendra Pála Deva, Govind Pála Deva (1175 A. D.), all of which except the last are dated in regnal years.

General Cunningham[1] takes the names from the Amgáchhi plates and adds to them the name Deva Pála from the Mungir plate and that of Sura Pála from the Buddal pillar. He takes the date of the Sárnáth inscription as settled and allowing 25 years to each of the thirteen names in his list between Vigraha Pála II. and Go Pála, places the latter in 765 A.D. The rectification in the list due to the Bhágalpur plate reduces the number of names and in addition the average of 25 years for each reign is excessive and even the 20 years given by Dr. Mitra[2] is far too high. Allowing the 20 years to each reign assumed by Dr. Mitra and accepting the Sárnáth date we have the following result:—

Pála dates.

	A.D.		A.D.
Go Pála ...	855	—— Pála ...	975
Dharma Pála ...	875	Vigraha Pála II. ...	995
Deva Pála ...	895	Mahi Pála ...	1015-40
Vigraha Pála I. ...	915	Naya Pála ...	1040-
Náráyana Pála ...	935	Vigraha Pála III. ...	1080
Rája Pála ...	955		

This calculation assigns the accession to power of the Pála dynasty of Magadha to the latter half of the ninth century. Those who have followed the remarkable coincidences in form, language and recorded facts between the grants of the Bengal Rájás and those assigned to the Kumaon Katyúris will readily see that all are

[1] Arch. Rep., III., 133: the initial date of Go Pála is given as 765 A.D. at p. 134 and as 850 A.D. at p 139. [2] J. A. S. Ben., XLVII., i., 394.
[3] *Ibid.*, VII., 40: XXXIV., i., 139: XLVII., i., 402.

derived from a common original. The quaint list of officials to whom the grants are addressed has no parallel elsewhere. We find it, in a modified form, in the inscriptions of the Senas, the successors and in part the contemporaries of the later Pálas. In the Bákirganj inscription of Kesva Sena (1136 A.D.) the following titles occur:—

'*Samupagatásesha rája rájanyaka rájnibálaka rájaputra rájámátya mahápurohita mahádharmmádhyajná mahásándhivigrahika mahásenápati mahádauhsádhiká chárodwaranika naubala hastyaswagomahishájávikádi vyáprita gaulmika dandapásika dandanáyaka neyayapatyádínanyánscha sakalarájyádhipajívnodhya kshanodhya kshapravaránscha chhattabhattajátíyán, Bráhmanabrákshmanottaranscha.*'

Here, too, the grant is dated in sanvat 3. A similar formula occurs in the Tarpandighi inscription of Lakshmana Sena[1] dated in sanvat 7.

Formula of western origin.

The short list of officials given in the grants of the Ráthor Rajas of Kanauj[2] has nothing in common with these Pála lists and we have to look for their origin elsewhere. We think that this will be found in the influence of the Hindu revivalists from western India, for the beginnings and germs of these lists are traceable from the Vallabhi grants of Gujrát onwards in western inscriptions.[3] The Gurava who was minister of the Pálas was a Bhatta, a family who for generations were scribes of the rulers of Gujrát and the Guravas are to this day in charge of the Saiva temples in western India. The practice of dating in regnal years was general in western India after the reign of Vikramáditya VI. (1075 A.D.), of whom Mr. Fleet observes[4] that:—"After his time it became the custom for his successors, as a rule, to date their inscrip-

[1] *Ibid.*, XLIV., 1. [2] *Ibid.*, XLII, 327: dated in 1231 A.D.

[3] Dhruvasena I. has the title Dandanáyaka, Ind. Ant., IV., 107: see especially Guhasená's inscription, *Ibid.*, p. 175, and the plate edited by Prof. Bhándárkar in J. B. B. R. A. S., X., 77, and the Gurjjara grants of Dadda in Ind. Ant., VII., 61; In an inscription found at Seoni we find a grant of Pravara Sena, Raja of Vákátaka, in which the form of the date of the grant is somewhat similar to that given in the Pandukeswar plates;—"*pravarddhamána rájyasanva tsare ashtádasamé.* Prinsep translates this sentence, "in the eighteenth year of his reign," but notes that it may mean 'date of the growing (or current) reign'. Vákátaka lay between the Bay of Bengal and the Sri Saila hills to the south of Haidarabad: *antea.* The Jaina Merutunga mentions the '*Vikrama Rája rájya-kála*' or dynastic year of Vikrama which commenced 17 years earlier than the Vikrama era or *Rájya-arambha*: J. B. B. R. A. S., IX., 149: J. A. S. Ben., V., 726. [4] Ind. Ant., VII., 189, 302: VIII., 192.

tions not in the Saka era but in the years of their reigns coupled with the name of the *samvatsara* of the particular year under reference." This is not strictly in accordance with the Kumaon practice, but it is of a similar nature and is another link in the chain connecting Kumaon with western influences. The formula for the regnal year occurs in a Pála inscription already noticed in exactly the same peculiar words as those used in the Pandukeswar plates, but it is also the 'standard formula' in Chalukya grants[1] and occurs in one of Udyotaka Kesari Deva[2] of Kalinga. The form of dedication and the precatory verses at the end are common[3] to all India. We have, however, the tribal name of the scribes the same in all the Pandukeswar and many of the Pála grants.

In addition there is the express statement that Dharma Pála visited Kedár, a connection that was kept up by Deva Pála, and it was in their time (the latter half of the ninth century) that these Pandukeswar grants were inscribed. We are not without further evidence to show a connection between Bengal and Kumaon. The Senas,[4] who followed the Pálas in Mágadha, have left an inscription at the great temple of Jageswar beyond Almora, which though very imperfect allows the name Mádhava Sena to be read. The Rájas of Mágadha are distinctly mentioned in the Nepál annals as having made incursions into the hills. Go Pála was probably the first to extend his dominion northwards and his conquest was confirmed and enlarged by Dharma Pála, whose generous treatment of the vanquished in sending them back to their own country laden with presents was so unusual that the conquered when reflecting on the deed 'longed to see him again.' It is evident, therefore, that there was no permanent occupation of the country and instead a semi-friendly relation arose which was further cemented by the enlistment of followers of the Bengal Rája in the service of the hill chief. It is to these circumstances that we owe the occurrence of the names of the hill-districts of Lásáta and Bhot in the Pála inscriptions. It may be suggested that all these records should be referred to an intrusive Bengál colony settled in the Katyúr valley, but with existing materials this theory must be negatived.

[1] *Ibid.*, X., 60. [2] J. A. S. Ben., VIII., 557. [3] *Cf.* Burnell's 'Elements of South Indian Palæography.' [4] Thomas's Prinsep, II., 272: J. A. S. Ben., XLVII., i., 396.

Decline of the Katyúris.

There is little in the nature of records that can be relied upon to help us in ascertaining the time when the power of the Katyúris began to decline, but there are several traditions as to their dispersion which will aid us in estimating the causes of their downfall. One of these causes was the tyranny and incapacity of the later Katyúris. The curse pronounced on the family by Nar Sinha worked through them as the following story regarding Dham Deo and Bír Deo will show:—"The revenue of the country was collected in kind and it was customary to give out a part of the grain brought into the Rája's treasury to be ground for the use of the household. Each village took its turn to prepare the flour, as a customary due to the State. The servants of the Rája, however, used to measure out the grain in the slightly indented bottom of the *náli*[1] turned upside down, but still called the grain given out a *náli*. When the people brought back the grain ground, the Rája's officer spread at the foot of a great stone seven mats and then mounting on the stone, scattered the flour in the wind. The heavier particles fell on the mats near the stone and none but the very finest reached the seventh mat. Then coming down he collected the flour from the seventh mat and told the people to take away the rest as it was not fit for his master's use. Of this fine flour, moreover, they were obliged to give a quantity equal to the nominal weight of the grain that had been given out to them from the Rája's stores. The Rája used also to seize their sons and daughters as slaves and the taxation was on no system. In order to provide themselves with water from a favourite spring (Hatchina) some twelve miles from the palace, the Katyúris stationed slaves along the road, who remained there night and day and passed the water from hand to hand. Bír Deo still further shocked the prejudices of the people by forcibly marrying his own aunt. He used to fasten iron rings on to the shoulders of the litter-bearers and pass through them the poles of the *dandi*,[2] so that the bearers might not be able to throw him down a precipice; but wearied with his tyranny and profligacy two men were at last found patriotic enough to sacrifice themselves for the good of the people. They reflected that they themselves were ruined, their children were taken as slaves and life was not

[1] A measure in common use. [2] A litter in use in the hills.

worth living: so one day being pressed into service as litter-bearers, they flung themselves and the Rája over a cliff and so perished. After the Rája's death dissensions broke out amongst his family and each seized on a portion of the kingdom for himself, whilst the countries beyond Kumaon and Garhwál that had always paid tribute to the Katyúris threw off their allegiance." This account represents very fairly the state of the country at the time of the rising of the Chand family. We find then the Domkot Ráwat ruling in Káli Kumaon in subordination to a branch of the Katyúri family which had established itself in a fort on the Súi range. Another branch was settled in Doti, a third in Askot, a fourth in Bárahmandal, a fifth still occupied Katyúr and Dánpur, and a sixth had several settlements in Páli, chief of which were Dwára Hát and Lakhanpur. The ruined temples and buildings in many parts of the country are attributed to these Katyúri Rájas. The low carved stone pillars in eastern Kumaon known as *brih kumbh* (*vrihastambha*) are also attributed to the same dynasty and are said to have been erected to mark the halts or encampments in the royal progresses. Batten writes that "some of these ruins, especially the *chabútras* and wells, are not without beauty, at least in their carving, and the great number of small temples even now standing, each as it were dedicated to a separate idol, and the quantity of idol images themselves which have been found in their precincts, show that the Katyúri Rájas were devout worshippers of the whole Hindu Pantheon. The shape of the buildings and the character of the sculptures are said to be similar to the architectural features observed in the south of India; in Bundelkhand and on the banks of the Nerbudda. From the account above given it will at once be seen that the dynasty of which we are speaking was of low-land origin, and that no signs of an aboriginal extraction are visible in its remains. As before the Muhammadan conquests of India, the rulers of a region so illustrious in the Shástras as the Himálaya mountains, being also by their position masters of the sacred sites at the various sources of the Ganges, may be supposed to have held rank equal with, if not superior to, the Rájas of *Katehir*, or the country between the mountains and the Ganges now called Rohilkhand; and as, after the establishment of the Muhammadan

empire in Hindustán, the Kumaon Rájas were found in hereditary possession of the Tarái by a tenure quite independent of any grant from low-land potentates, I see no reason for doubting that the Tarái throughout its whole extent formed an integral part of the Katyúri Kumaon Ráj. That it also formed an important part may be assumed from the almost absolute necessity still existing, that a large portion of plain country should, if not attached to the hills, at least be available for the annual resort of the hill-men and their cattle (an occupancy which under native rulers could hardly be maintained without an actual right of property in the soil, and actual separate possession thereof by the hill powers); and from analogies drawn from the late and existing feeling in Nepál in regard to the tract at its base." Beyond this all is conjecture regarding these ancient times; and the question whether Sambhal and Bareli were then subject to Katyúr may be left for discussion when more accurate materials are available.

There is nothing, however, to show us that during Katyúri times there was either such communication with the plains or such a surplus population in the hills as would enable them to colonise the Tarái. On the other hand everything that we know indicates that from the ninth to the eleventh centuries the Tarái had relapsed into its original state of forest and its towns were deserted and allowed to fall to ruin; in fact it was not till the sixteenth century that the hill state attempted to exercise any practical control over any part of the low-lands beyond the strip close to the foot of the hills, known as the Bhábar. Elsewhere we have given the pedigrees of the principal Katyúri families, but, strange to say, we do not find amongst them a single name of those known from the inscriptions already noticed. There is no reason, however, to doubt that these families are really members of the Katyúri stock, for, more than two centuries ago, their position as descendants of the old Rájas of Katyúr was recognised by the Chand rulers of Kumaon. It is commonly believed that the object of the Chands in neither destroying nor exiling the Katyúris was that they might be able to obtain wives for the members of their own family. The Chands often married Katyúri wives, but never gave their own daughters to the Katyúris.

These now intermarry with the families of the petty Vaisya Thákuri Rájas to the east of Doti and Jumla in Nepál. The Askot family also intermarries with the Nepálese, but of late years the poorer descendants of the Páli families have begun to intermarry with the more wealthy Khasiyas. Besides these dynasties sprung from the original stock, we find others who had no connection with the Katyúris[1] established at this time in Kumaon. Phaldakot and Dhaniyakot fell into the hands of a tribe of Káthi Rajpúts who claim to be of Surajbansi origin. Chaugarkha came into the power of the Padyár Rajpúts, whose capital village was Padyárkot. A family calling themselves Chandrabansi Rajpúts came from Pyuthána in Doti and established themselves at Mankot in Gangoli. After the conquest of Gangoli by the Chands this family returned to Doti, where their descendants still exist. Kota, Chhakháta, Katoli and the remaining pattis to the south became subject to the leading Khasiya families, whilst Sor, Síra, Dárma, Askot and Juhár were annexed to the Doti kingdom.

[1] The Manurál and Kálakoti Rajpúts claim descent from the Katyúris.

CHAPTER VI.

HISTORY—(*contd.*)

CONTENTS.

Rise of the Chands. Chand chronology. Earlier dates cannot be accepted. Harak Deb's statement. Sombansis of Jhúsi. Káli Kumaon. Som Chand. Atma Chand and his successors. The Khasiya revolt. Malla Rájas. Krá-challa Deva. Chand restoration. Musalmán historians. Garur Gyán Chand. Revolt of Nalu Kathávat. Early history of Garhwál and Dehra Dún. Siwálik hills. Timúr Lang. Garhwál Rájas. Udyán Chand. Bhárati Chand. Ratan Chand. Pedigree of the Doti and Askot families. The Bam Rájas of Sor. Kí-rati Chand. Conquest of Bárahmandal and Páli. Pedigree of the Páli Katyúris. Conquest of Phaldakot and Kota. Partáp Chand. Tára Chand. Mánik Chand. Khawás Khán. Bhishma Chand. Bálo Kalyán Chand. Conquest of Sor. Rudra Chand. Husain Khán Tukríyah. Tarái and Bhábar. Kumaon in the *Aín-i-Ak-bari*. Tarái. Attempt on Sira. Rájas of Sira. Attempt on Badhángarh and conquest of Katyúr. Lakshmi Chand. Invasion of Garhwál. Dhalíp Chand. Bijaya Chand. Tirmal Chand. Báz Bahádur Chand. Invasion of Garhwál. Extradition of Sulaimán Sháh. Administration. Conquest of Bhot. Invasion of Garhwál. Eastern Kumaon. Udyot Chand. Gyán Chand. Jagat Chand. Fateh Sáh of Garhwál. Pradípt Sáh. Lalat Sáh. Jayakrit Sáh. Pradhuman Sáh. Umed Singh. Sikhs and Gujars. Debi Chand. Ajít Chand. Kalyán Chand. The Rohillas. Quarrels with Oudh. Díp Chand. Intestine disputes. Murder of Sib Deo. Mohan Singh murders the Rání. Harak Deb Joshi. Mohan Singh murders Jaikishn Joshi and Díp Chand. Native administration of the Tarái. Pradhuman Sáh or Pradhuman Chand. The Joshiyána raid. Sib Singh. Mahendra Singh. Gorkháli conquest.

Rise of the Chands.

Whilst Kumaon was thus broken up into a number of petty kingdoms under rulers of different tribes, Katyúri, Khasiya and others, a family established itself in the eastern parganah which succeeded, though after the lapse of many centuries, in reuniting the province under one ruler. The founder of this family was Som Chand, a Sombansi or Chandrabansi Rajpút. Two stories are told as to the manner in which he first obtained a footing in Kumaon. The first informs us that Brahm Deo[1] Katyúri on settling in Súi was opposed by the

[1] Another account gives the name as Baichhla Deva and makes him the ancestor of Dham Deo and Brahma or Bir Deo. The Bais Rájas were lords of Kanauj in the seventh and perhaps also in the eighth century.

Ráwat Rája of Domkot, who refused to render submission to one who was obliged to leave his own country and had not the power to enforce obedience to his authority. The people themselves were divided into factions, each under its own leader, who espoused sometimes the cause of one Rája and sometimes that of the other according as interest or prejudice moved them. So matters remained for several years until there was no authority in the land and every one did that which seemed good in his own sight. The usual insecurity of person and property ensured and worn out by quarrels which were undertaken for the sake of a few all parties amongst the people agreed that the absence of any form of government was intolerable and that as it was impossible to reconcile the conflicting claims of the rival Rajas, the people themselves should send a deputation to the plains to seek out a cadet of some royal house to rule over them. The chief men of Kumaon, accordingly despatched a trusty messenger to visit the courts of northern India and select a Raja for them. In those days the lunar dynasty of Kanauj was famous throughout Upper India, and Som Chand, a member of that family, was found at Jhúsi an ancient town on the left bank of the Ganges opposite the Dáraganj suburb of the city of Allahabad. His horoscope was carefully examined and pronounced by the astrologers to contain all those conjunctions of the planets which foretold a prosperous future and fitness for the royal state and he was at once brought to Kumaon and installed at Champáwat. The second story makes Som Chand the brother of the reigning Raja of Kanauj and states that whilst on a pilgrimage to Badrináth he met Brahm Deo and so ingratiated himself with the feeble old man that he was invited to remain in Kumaon. Som Chand consented and received the daughter of Brahm Deo in marriage and with her as dowry fifteen *bísis* of land in Champáwat and considerable grants in the Bhábar and Tarái. There is much reason to doubt that such a person as Som Chand ever existed or at least that we can accept as history the stories told regarding him and his immediate successors in the local traditions. It seems better, however, to give this local history exactly as it exists and to state the reasons for distrusting portions of it in their proper place. There is no written history of Kumaon and the statements which are made in the course of this narrative are simply based on traditions

many of which were collected during the long and laborious life of the late Rudradatta Pant, a learned Brahman of Almora, and which were placed at my disposal by Sir John Strachey. Research has contributed very many additions and much corroborative matter and on the whole these traditions may be considered quite as fairly trustworthy in the earlier years as any other similar accounts in India, and in the later years they appear to be more accurate and complete than any other similar records with which we are acquainted. It ought not to be considered strange that there should be so few writings in existence relating to the times of the former Rajas of this country, if due regard be had to its history. In Garhwál few of the old families were left at the British occupation and the official records had been burned by the Gorkhális. In Kumaon, too, the successive revolutions led to a redistribution of property amongst the adherents of the party for the time being in power and all the old records were either destroyed or disappeared.

Chand chronology.

Accepting, however, Som Chand as an historical personage, the main features of the several stories regarding him may be resolved into the very probable and simple statement that he came to Kumaon as an adventurer and being of Rájput blood married the daughter of the petty Raja of Súi and in course of time supplanted his father-in-law. But before we proceed further we must examine the Chand chronology more closely and endeavour to discover some approximately correct date to which we can assign their settlement in Kumaon. Two dates are commonly given for this immigration; one is 742 or 757 V. S. corresponding to 685 or 700 A. D., and the other is 1235 V. Sanvat or 1178 A.D. Even amongst those who adhere to the former dates there are variations in the successions and lengths of reigns which are very troublesome and difficult to reconcile. We shall therefore place the reader in as good a position as ourselves for exercising a judgment in this matter by giving the three principal lists which for convenience we will call A, B, and C. The list A. was obtained from Rudradatta Pant already mentioned; list B. from Bhima Sinha, titular Raja of Kumaon at Almora, and list C. from an official report made in 1849 A. D.

List of Chand princes.

Names.	Date of accession according to the Vikrama Sanvat and length of reign.			
	A.		*B. and C.*	
	Accession.	Reign.	Accession.	Reign.
1. Soma Chand ...	757	21	742	21
2. Atma ,, ...	778	19	763	7
3. Purana ,, ...	797	18	770	18
4. Indra ,, ...	815	20	788	10
5. Sonsár ,, ...	835	35	798	18
6. Sudha ,, ...	870	20	816	10
7. Hammíra ,, ...	890	23	826	17
8. Bína ,, ...	913-26	13	843-55	11
Khasiya interregnum ...	926-1122	196	855-1067	213
9. Bira Chand ...	1122	15	1067	13
10. Rúpa ,, ...	1137	13	1080	20
11. Lachchhmi ,, ...	1150	20	1100	8
12. Dharma ,, ...	1170	8	1108	19
13. Karma ,, ...	1178	19	1127	9
14. Kalyán ,, ...	1197	9	1136	21
15. Nirbháya ,, ...	1206	21	1157	7
16. Nara ,, ...	1227	7	1164	18
17. Nánaki ,, ...	234	18	1182	31

It will be seen that the names in all three lists agree but there are differences in the length of the reigns of the pre-Khasiya Rajas and a transfer of the reigns of those who come afterwards which may well be due to the errors of copyists. For the next series all three copies differ in the length of the reigns and one gives a different order of succession :—

Names.	Date of accession according to the Vikrama Sanvat and length of reign.					
	A.		*B.*		*C.*	
	Accession.	Reign.	Accession.	Reign.	Accession.	Reign.
18. Ráma Chand ...	1252	10	1213	7	1192	21
19. Bhíkma ,, ...	1262	21	1220	19	1213	7
20. Megha ,, ...	1283	7	1239	9	1220	19
21. Dhyána ,, ...	1290	19	1248	14	1239	1
22. Parbata ,, ...	1309	9	1262	21	1240	22
23. Thohar ,, ...	1318	14	1283	7	1262	21
24. Kalyán ,, ...	1332	21	1290	18	1283	7

The difference between the lists 'B' and 'C' is probably due to the copyist of list 'C' mistaking in some instances the date of decease for the date of accession. Both these lists make Garur Gyán Chand, the successor of Kalyán Chand differing in this respect from list A :—

Names.	A.		Names.	B.		C.	
	Accession.	Reign.		Accession.	Reign.	Accession.	Reign.
25. Triloki Chand,	1353	7	Guru Gyan Chand	1308	10	1290	18
26. Damara „	1360	18	Udhyán „	1318	17	1308	10
27. Dharma „	1378	23	Atma „	1335	8	1318	17
28. Abháya „	1401	30	Triloki „	1343	7	1335	15
29. Garur Gyán „	1431	45	Damara „	1350	13		
30. Harihar „	1476	1	Dharma „	1363	17		
31. Udhyán „	1477	1	Abháya „	1380	11		
32. Atma „	1478	1	Hari „	1391	19		
33. Hari „	1479	1	Vikrama „	1410	9		
34. Vikrama „	1480	14	Bhárati „	1419	19		
35. Bhárati „	1494	24	Ratana „	1438	9		
36 Ratana „	1518	27	Kírti „	1447	18		
37. Kírati „	1545	15	Pratápa „	1465	10	As in B.	As in B.
38. Partáb „	1560	14	Tára „	1475	17		
39 Tára „	1574	16	Mánik „	1492	11		
40. Mánik „	1590	9	Káli Kalyán „	1503	18		
41. Káli Kalyán „	1599	9	Fateh „	1521	5		
42. Puni or Puran „	1608	4	Bhíkhma „	1526	26		
43. Bhíkhma or Bhishma „	1612	5	Kalyán „	1552	25		
			Rudra „	1577	30		
44. Balo Kalyán „	1617	8					
45. Rudra „	1625	29					

We have several grants of Rudra Chand dating from 1489 Saka=1567 A.D. to 1518 Saka=1596 A.D. which agrees with the dates given in list A. *viz.* 1567 to 1597 A.D. and since as soon as we come to apply corroborative evidence we find it the most trustworthy of the three we may well accept it for all so far as it goes. We have an inscription of Vikrama Chand dated 1423 A.D. which also agrees with the date given to that prince in list A. and again an inscription of the Mankoti Raja.

Earlier dates cannot be accepted.

Though accepting the later dates it seems impossible to retain those given for the earlier members of the family. If we retain 700 A. D. as the date of Som Chand's accession we shall have to crowd the coming of Sankara, the vast political revolutions consequent on the downfall of Buddhism, the reigns of the thirteen Katyúri Rajas known from inscriptions (three of whom ruled over twenty years,

each) and the reigns of their successors into the sixty-six years between the visit of Hwen Thsang and the accession of Som Chand. We must confess, however, that there is nothing in the length of the reigns given in the lists which will admit of any considerable correction. The first eight reigns alone appear unusually long, yet they give an average of only twenty-one years, a by no means impossible chronology. Still we cannot accept the initial date and the only way open for reconciling the dates in the list with facts is either to reject Som Chand and his successors up to Thohar Chand as inventions of later years or to accept them and revise their chronology. If we retain Som Chand and his successors as historical personages we must abandon the story of his marriage with the daughter of the last Katyúri prince of Káli Kumaon. Som Chand may, indeed, have married the daughter of a hill-prince but considering that the Katyúri family must have then been settled in Joshimath and their later seat Kárttikeyapura was yet unknown, the connection of their name with the bride of Som Chand must have been made many years after the marriage had taken place. If we abandon the connection between Som Chand and Brahm Deo there is little need for further adjustment, but if we retain the names and the story we must amend the chronology. The only suggestion that appears possible to me in this case is to omit altogether the Khasiya interregnum as an interruption in the Chand chronology. It is much more probable that the Khasiya dynasty was contemporary with that of the Chands and only came into collision with them when Sonpál Khasiya and Bíra Chand finally decided the question of the pretensions of their respective families to the tract along the Káli. In one of the lists and in an old tradition Bíra is made a grandson of Sonsár Chand and not a mere descendant and it seems unlikely that the descendants of Sonsár Chand should be so well known as at once to be selected to fill the throne if so many years had elapsed since his family occupied Champáwat. We might therefore fairly omit the reigns of the Khasiya Rajas as an interruption of the Chand chronology, and taking the more moderate reigns for this period given in the list B. we arrive at the date 1010 Sanvat or 953 A.D. for the accession of Som Chand.

Harakdeb's statement.

There is much, however, to be said in favour of the suggestion that the Chand history commences at a much later date. The date 1235 Sanvat or 1178 A.D. would, if we retained the existing names, compel us to crowd into the period between 1178 A.D. and 1423 A.D., the well-ascertained date of Vikrama Chand, some thirty-four reigns, and thus allow only seven years to a reign, a very low and improbable average. From a memorandum, made for Government by Mr. W. Fraser in 1813, on a conversation which he had with the celebrated Kumaoni statesman Harakdeb Joshi, the early history of the Chands is thus given :—" The first Raja, a Rajpút by birth Thohar Chand, was taken from Jhúsi at the age of 16 or 17. His son, grandson and great-grandson succeeded when the line became extinct. On this event, a second person descended direct from the uncle of Thohar Chand by name Gyán Chand was brought from Jhúsi and placed on the throne." In the account of the succession to Thohar Chand one list makes Garur Gyán Chand sixth and the other makes him second in descent. According to the more correct list he ascended the *gaddi* in 1374 A.D. and Thohar Chand commenced to reign in 1261 A.D. The latter date is just thirty-eight years after the date on an inscription of the Dúlu Raja Kráchalla noticed hereafter, which shows us that some years previous to the accession of Thohar Chand there were Chandrabansis in Káli Kumaon. Of the three names given in the inscription not one agrees with any name in the lists, but unless we may suppose two or three families of the same clan of equal importance in the same tract these Chands of Kráchalla's inscription belong to the same family as the Chands of tradition, and therefore Thohar Chand can hardly have been the first of his race in Kumaon although he was probably the first to attain to other than very local importance. We gather this much, however, that in the first quarter of the thirteenth century at least three Chandrabansi chiefs held the position of *mandaliks* or heads of circles as the smaller fiscal sub-divisions were called and that they then owed fealty to the Raja of Doti and in no respect differed from the Ráwat Khasiya chiefs their neighbours. The latter alone have the title of Raja, and the inference follows that the power and influence which the later traditions assign to the earlier Chands,

if true at all, must be taken as referring only to the *mandal* or circle alone within which they exercised authority.

Sombansis of Jhúsi.

Sir H. M. Elliot[1] states that Som Chand was a Chandel and not a Chandrabansi and that he came from Jhánsi, not Jhúsi; but there is no authority for either of these changes in the local account. Tradition is unanimous in representing the family as of the Sombansi clan, and the name Jhánsi was not known until its foundation by Bír Sinh Deo in the reign of Jahángír.[2] Jhúsi stands on the site of an ancient city called Pratishthana and contained a Rajput colony at a very early date. The Sombansis of Partábgarh in Oudh state that the original seat of their clan was Jhúsi; that Sukrama Sinh, one of their ancestors who lived there, had three sons, one of whom went to Nepál, the second to Hardui, and the third remained at Jhúsi. The son of the last was cursed by a Musalmán fakír and lost his kingdom in consequence. If we assign Som Chand to this family we shall have to place him much later than the date given by Elliot, 1178 A.D. This latter date, however, is clearly derived from Mr. J. H. Batten's notes[3] quoted below and has no authority of its own. Like most of the dates given here it is founded on information received from some of the Kumaon Brahmans. From an old inscription dated in 1027 A.D., found at Jhúsi, it appears that a Rajpút family then held possession of the tract of country lying along the left bank of the Ganges near Prayág, an ancient name of Allahabad. The names given are [4]Vijayapála, Adyapála and Trilochanapála, and this would

[1] Beames' Elliot, I., 73 [2] Gazetteer, I., 438. [3] Report on Kumaon and Garhwál, page 164: Mr. Batten's note on this date is as follows:—"On a reference to contemporaneous history we find that the year 1194 A.D. is the date generally fixed for the conquest of Kanauj by the arms of Kutb-ud-dín, the Lieutenant of Shaháb-ud-dín, and also that 1195 A. D. saw him extend his victories across the Ganges to Budaun. It is I think extremely probable that an incorrect tradition may have anticipated the commencement of the Chand dynasty in Kumaon by 16 years, and that in the great revolution which transferred the empire of the Gangetic plain as far as Benares from the Rahtors to their Muhammadan victors, when the dispersion of numerous powerful Hindu tribes took place everywhere; among them the earliest Chand and his followers found their way to Kumaon. But, whether the elevation of this race in the hills preceded or followed the fall of the Kanauj kingdom, the shock of that fall may well be supposed to have reached to the foot of the Himálaya, and hardly to have been arrested at Budaun and the lower parts of Katehir. The rule of the hill powers, whether Khasiya or Chand, if it had survived at all the decadence of the Katyura line, and the breaking of the Rajpúts petty chiefships, must have been rudely shaken at this period." [4] As. Res. XVII., 621; J. A. S. Ben., XXXI., 5.

show us that so late as the first quarter of the eleventh century a Rajpút colony existed at Jhúsi from which the Kumaon Chands might have come. Jhúsi is also traditionally connected with the kingdom known as Harbong ká ráj, where the cruel and foolish Rája Harbong lived. Elliot gives some account of his life and character, and it is to him that the Sombansi legend apparently refers when stating that the grandson of Sukrama Singh was cursed by a Musalmán fakír. The Musalmáns say that Harbongpur was destroyed and Jhúsi built and consecrated by Sayyid Ali Murtaza, who died as late as 1359 A.D., but this tradition is little to be trusted, for many acts are assigned to this saint which must have taken place long before the fourteenth century. The Hindus similarly ascribe the death of Harbong and the revolution in Jhúsi to Machchhíndra and Gorakhnáth, their great miracle-workers. The first is the great Buddhist patron saint of Nepál, Padmapáni-Aryávalokiteswara-Machchhíndranátha. Gorakhnátha, according to the Nepál annals,[1] visited the valley in order to see the great Machchhíndra in the reign of Raja Bar-deva in the Kaligata year 3623 or 521 A.D. Now Bar-deva is seventh in descent from the Lichchhavi Ansu-Varma, who was Rája of Nepál shortly before Hwen Thsang visited the valley in 637 A.D., so that the Nepálese Machchhíndra may be assigned to the middle of the eighth century. From other sources, however, we know that Gorakhnáth must have lived in the fifteenth century[2] and that he was fifth in spiritual descent from a Matsyendra or Machchhíndra, who therefore lived in the fourteenth century or about the same time as the Sayyid Ali Murtaza. We must, therefore, reject both traditions and refer to the Musalmán historians. Abul Fazl tells us that Mahmúd made two expeditions to Benares one in 1019 and another in 1022 A.D., but these are not mentioned by other historians and the inscription in 1027 A.D. shows that even if they took place Jhúsi was not affected. In 1033 A.D., however, we have an account[3] of the conquest of Benares by Ahmad Niáltigín, who crossed the Ganges and marching along the left bank "unexpectedly arrived at a city which is called Benares and which belonged to the territory of Gang. Never had a Muhammadan army reached this place," and this we would take as the date for the dispersion of the

[1] Wright's Nepál, 140. [2] Wilson, I., 213. [3] Dowson's Elliot, II., 122.

Rajpút family who ruled in Jhúsi. Our adjusted date for Som Chand's accession is only fifty-eight years before the raid of Níáltigín.

Káli Kumaon.

The portion of Kumaon lying along the Káli has traditions[1] of its own regarding its early history which help to throw light on the state of the country at the time of the Chand immigration. The name 'Kumaun' had here its origin for Vishnu, in his tortoise incarnation, dwelt for three whole years on Kánadeo,[2] which ever afterwards was called Kúrmáchala and hence the modern name Kumaon. It was not until after the Chands had settled in Almora that the name Kumaon covered its present limits and Káli-Kumaon was restricted to its original signification. The people generally call themselves Kumái or Káli-Kumái, but in common conversation are known by the names of the fiscal sub-divisions in which they reside or are spoken of as Khasiyas by persons belonging to castes other than their own. The mythological tradition regarding Kumaon tells us that the Lohughát valley and its neighbourhood was, in the Satya ages, inhabited by the Devas, Daityas and Rákshasas. When Ráma slew the Rákshasa Kumbha-karna, he cut off the head of the demon and sent it to Kumaon by the hands of Hanumán, who cast it on the hill of Kúrmáchala. The skull filled with water and became a lake some four *kos* square, and many of the Daityas and Rákshasas perished in its waters. The lake remained during the Treta and Dwápara ages, and it was not until the incarnation of Vishnu as Krishna took place that any change occurred. Ghatotkacha, son of Bhímasena by the Rákshasi Hidimbí, invaded Kumaon and was slain by Kúrma, Raja of Angadesa. Bhímasena subsequently arrived and avenged the slaughter of his son and kinsmen and to commemorate the event erected and endowed two temples; one in honour of Ghatotkacha and the other in honour of his wife, the Rákshasi Hidimbí. The temple dedicated to Ghatotkacha, who is now known as Ghatkadebta, is situate on the hill above Phúngar,[3] one mile to the east of Champáwat, and the other is on the same hill a little lower down,

[1] The greater part of the local folk-lore and traditions contained in the following sketch of the history of Kumaon are faithfully reproduced from the notes of the late Rudradatta Pant. [2] A peak in Patli Chárál to the east of Champáwat. [3] Bhíma is said to have chosen this site because the inhabitants were Rákshasas and of the same tribe as Hidimbí.

so that the blood of goats sacrificed to Ghatku is said to mingle with that of the offerings to Hidimbí. Bhímasena then broke the banks of the lake which were formed of the bony substance of the skull of Kumbha-karna and let out the waters which became the source of the Gandaki, now known as the Gidhiya river. The oldest seat of government in the tract was at Súi in the Lohughát valley, where the ruins of an ancient temple of the Sun exist amidst a clump of lofty *deodár* (Indian cedar). The capital was then transferred to Domkot or Donkot, whose ruler was a Khasiya Thákur of the Ráwat clan.[1] The oldest of the existing forts is that of Katolgarh.

Som Chand, 953-974 A D.

When Som Chand came to Kumaon he built the first home of the Chands on the fifteen-acre plot received by him from his father-in-law and called it Ráj-búnga,[2] which subsequently gave place to the name Champáwat. He found the country divided into a number of small pattis, in each of which was a semi-independent ruler. These again took part in the quarrels of the two great factions, the Márás[3] and the Phartiyáls. Perhaps in the entire history of India there is no record of such bitter and long-continued strife as has existed from time immemorial between these two parties. To their internecine strife is to be attributed the intrusion of the Chands in the tenth century, the downfall of the same family in the eighteenth century, the defeat of our levies under Hearsey in 1815 and the litigation in the Nain Singh case[4] in 1867. In the year of grace 1883, the feeling is as strong as it was eight hundred years ago, and the difficulties encountered by an alien ruler like Som Chand may readily be understood under the light of modern experience. Som

[1] Remains consisting of old walls and chabútras are still to be seen on the site of Domkot, and persons who claim descent from the Ráwat Rajas survive in Gumdes and village Sáli in Chárál. Every male child born in the Ráwat's family use to have a mark on its neck by which it was known, but since royal power departed from them the mark has disappeared. [2] Or royal 'fort,' to distinguish it from the ordinary forts of the Khasiya chiefs. Similarly the word '*razái*' for quilt was never used until the Gorkháli invasion from its likeness in sound to the title "*Rája Rajái*" borne by the Kumaon princes, nor would the Dehli officials call the Garhwáli Rajas 'Sáh' because of its being pronounced like 'Sháh;' they always gave the affix 'Sinha' instead. [3] The Márás out of Káli Kumaon are known as Muhuras, but the Márás of Súi state that the latter are merely the bearers of the Raja's dándi (*muhur*) or palanquin. The people of Ryúni, near Ránikhet, who were subsequently appointed to this office, were of the Muhura caste corresponding to the Kahárs of the plains. The word '*muhura*' may be accepted as the generic term, the word '*mára*' being peculiar to Káli Kumaon. [4] Nain Singh was a Mára.

Chand was, however, equal to the occasion. He first, with the assistance of the Tarágí clan, subdued the Ráwat Raja and having brought his small territory into a semblance of order, invited the petty chiefs and the heads of the factions to attend his darbár. He treated each of the latter with equal honour and when he had ascertained their power and the number of their adherents, he made the head of one faction the chief adviser and minister in civil matters and the head of the other faction chief of his forces. The principal village of the Márás was Kot with the fort of the Katolgarh and the chief village of the Phartiyáls was Dungarí near Súi, and the headmen of these villages were the first Díwán and Bakshi of the new state.[1] Som Chand next reviewed the village rights and constitution. He revived the ancient system of headmen in each village called *búrhas* and *sayánas*, who were responsible for the police and fiscal arrangements of their respective villages or groups of villages. This was so very old an institution in these hills that the *búrhas* of Chaukur and Phúngar declared to Som Chand that their office had come down to them in unbroken succession from the original Daitya rulers of Kumaon. The claim was allowed and permission was given to them to receive fees as representatives of the old rulers in all cases of trial by ordeal. The *kámdárs* or immediate courtiers of Som Chand were Joshis and Bishts and Muduliya Pándes of the Kanaujiya sub-division from the plains. The general civil and military administration was entrusted to the Joshis, whilst the Bishts and Pándes, who were Brahmans of a superior caste, held the offices of *guru, purohit, pauránik, baid* and *basoya*. These last were also called Chautara[2] Brahmáns, or those who did the four quarters of the work of the Raja. Som Chand must have had considerable support to be able to reduce to submission the turbulent clans of his adopted country and hand over his small state intact to his son. At his death he possessed in right of his wife the southern half of the present parganah and by right of conquest the remainder. To this may be added Dhyánirau and parts of the Rangor and Sálam pattis of Chaugarkha. Som Chand, however, held all this tract, as many of his successors did, as feudatory of the Mahárája of Doti, to whom he paid tribute, so that at this stage

[1] These two villages are still looked on as the head-quarters of the respective factions and are each inhabited by people of its own party. [2] A term now used as a title, borne by the junior members of the Raja's family in Nepál.

of their fortunes the Chand family was little better off than the majority of the more important landholders in the province.

Atma Chand and his successors, 975—1055 A.D.

Som Chand was succeeded by his son Atma Chand, and though little remarkable or worth recording took place until the reign of Bína Chand, the tradition regarding him affords grounds for leading us to suppose that the work of consolidating the power and influence of the little state none the less progressed. We are told that the rulers of all the neighbouring petty states paid court to Atma Chand at Champáwat. Some said that they did so because they feared lest they should be swallowed up in the process of extension which they had no doubt would be carried out as vigorously by his successors as had been done by Som Chand himself. Others excused themselves on the ground that Atma Chand was on his mother's side a Katyúri and therefore entitled to their allegiance. The solidity of the basis of the Chand power assumed for the family at this time by the local annalists may easily be gathered from these excuses for their submission made by those who were naturally opposed to the admission of strangers. Atma Chand was succeeded by his son Purana, of whom all that is known is that he was a great hunter and spent much of his time in the Bhábar engaged in hunting. He was followed by his son Indra Chand, who is said to have brought into Káli Kumaon the silk-worm and to have introduced the manufacture of silk which flourished with a certain amount of success until the industry perished during the Gorkháli usurpation. The silk-worm was brought from China into Tibet by the Chinese Queen of Srongtsan Ganpo in the seventh century, and through his Nepálese Queen it was introduced into Nepál and thence doubtless came into Kumaon. Of the immediate successors of Indra Chand, *viz.*, Sonsár, Sudha, Hammira or Hari and Bína, nothing is known beyond their names. The last named died childless, and his death was the signal for a revolt of the Khasiya population.

The Khasiya revolt.

Bína was a weak-minded ruler who allowed the affairs of the country to fall into the hands of unscrupulous servants, so that on his death without issue, "the Khasiyas lifted up their heads and established their *ráj* in Káli Kumaon." The Brahman and Kshatriya immigrants

and those who had grown wealthy under the Chands were made to feel the power of the Khasiya chiefs, "for," said they, "these have long tyrannised over us and our power has now come." So bitterly were the hopeless friends of the Chands persecuted that all the men of note who did not belong to the party now in power fled from the provinces or were expelled by force and filled the courts of the neighbouring states with complaints against the Khasiyas. The Katyúrís, too, in western Kumaon were appealed to for assistance and invited to take back their old possessions, but they were too much occupied with their own affairs to be able to give any material aid and excused themselves on the ground that as "the *ráj* of Káli Kumaon had been given by them as a free gift to the Chands, it belonged to the Chands, who should reconquer the country if they wanted it, that they would not take it back." It would appear from this statement that the Khasiya revolution was the result of a national movement not only against the foreign dynasty but generally against all intruders from the plains. The names of fourteen of these Khasiya Rajas are given with the length of their reigns and they are stated to have ruled for nearly two hundred years over Káli Kumaon, acknowledging, however, the supremacy of the Raja of Doti as their Chand predecessors and successors are also said to have done. We have already considered the suggestion that the Khasiya revolution should not be allowed to interfere with the Chand chronology. It may fairly be assumed that after the death of Atma Chand the family of the Ráwats of Domkot who emigrated thence to Sáli began to lift up their heads and that in the reign of Bína Chand they actually seized on Champáwat near their old home. The names of these Khasiya Rajas may well be the names of those of the Domkot house, for they show no trace of lowland Rajpút origin. The names[1] are as follows with the length of their reigns :—

1. Bíjar, 21.	6. Kalsu, 11.	11. Nágu, 19.
2. Jíjar, 7.	7. Jahal, 20.	12. Bhágu, 11.
3. Jájar, 19.	8. Múl, 8.	13. Jaipál, 16.
4. Jár, 9.	9. Guna, 19.	14. Sonpál, 12.
5. Kálu, 17.	10. Bírha, 9.	15. Indra, 15.

[1] Compare some of the names of the similar Kiráti dynasty of Nepál given in Wright's Nepál, 312, and Prinsep, II., 268. We have the names Guna, Jigri, Nane Luk, Guja, Varma, Kesu, Suga, Shimbu, &c., in appearance of the same character as those given above.

The last name does not occur in list A. This was evidently a period of general discontent throughout the hills amongst the aboriginal tribes. We find from the Nepál chronicles that about this time the Vais Thákurs of Noákot raised the standard of revolt, and for 225 years Nepál was broken up into a number of petty principalities like Kumaon. To fix this date we have fortunately something more than mere conjecture. The Nepál annals as well as the Musalmán historians give the date 1324 A.D. for the emigration of Hara Sinha-deva from Simraun to Nepál, where he founded the dynasty which succeeded the Thákuri princes. If from this we take 225 years, the date 1099 A.D. will give us the first year of the Thákuri rebellion in Nepál. But we are also told that for seven or eight years previous there was no Raja in Nepál, because the last of the Karnátaka Rajas, Harideva, was subdued by Mukund Sena.[1] Now of this Mukunda Sena we have no certain information, but we know that the Senas established a separate dynasty in Magadha in the last decade of the eleventh century and that Mádhava Sena, the great-grandson of the founder of the line in Bengal, visited the Jageswar temple near Almora and bestowed lands on that institution. Prinsep[2] suggests the date 1123 for this prince, which would be twenty-five years later than the date of Mukunda Sena according to the Nepál annals.

Malla Rajas.

According to the chronology we have followed an inscription found at Gopeswar in Garhwál belongs to this period. It records the erection by one of the Malla Rajas of a royal edifice in the year 1191 A.D. The translation of this inscription is as follows :—

Inscription from Gopeswara.

Om. Be it auspicious. The lord paramount and most venerable king of kings, the fire of whose valour has consumed the swords of his enemies, and the gems of whose nails are deeply tinged with the vermilion on the foreheads of the wives of inimical princes. Who in the depth (of his understanding) and extent of his renown was like the great ocean, and the splendour of the gems of whose footstool flashed on all sides with the collected rays of luminous

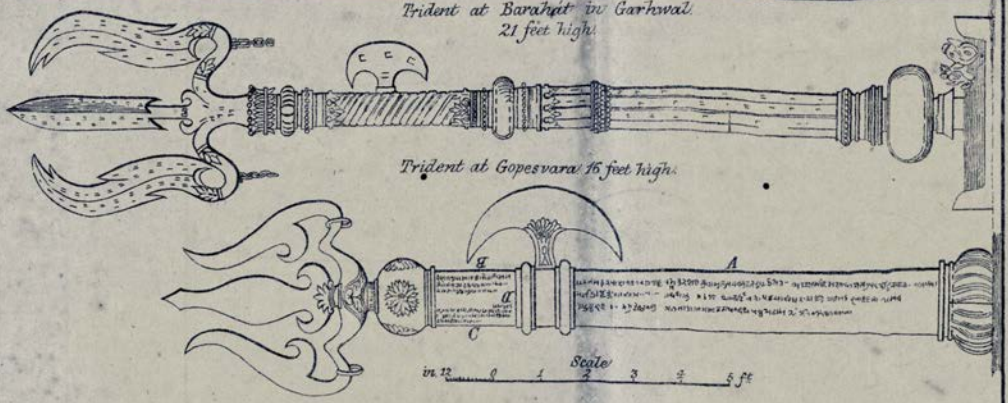
[1] Wright, 172. [2] Prinsep, II., 272.

rubies on the heads of the assemblage of his allied and hostile princes. Who is as a lion amongst royal elephants and a ruler of the land of Dánavas[1] as Vikramáditya had been of Vetala. Who like Nárayana uses all princes as his eagles (*garuras*), and is endued with the three energies. Who is sprung from the family of Gauda and is a *tilaka* (signet of royalty) to the Vairátha Kula and a recent incarnation of Bodhisatva. This is the prosperous Aneka[2] Malla, the *tilaka* on the rulers of the earth, who with his encompassing forces has subdued Kedára *bhúmi*, and having made his conquered territories as his own province, free of warfare, the lord of earth has erected thereupon his royal edifice of Srí Padmapáda, which he has adorned with everything for his enjoyment, giving of gifts and feasts. In the year of the Saka king past 1113 by solar calculation * * * the number of days past is Ganapati 12, Friday, the 9th of moon * * * Written by * * * Malla Srí Raja Malla, Srí Iswari Deva, Pandita Srí Ranjana Deva, and Srí Chandrodaya Deva, in conjunction with the general and captain.

Bárahát trident.

We have another record of this period in the inscription on the trident at Bárahát in Tihri.[3] The base or pedestal of this trident is made of copper in size and shape like a common earthen pot; the shaft is of brass about twelve feet long, the two lower divisions decagonal and the upper one spiral. The forks of the trident are about six feet long, and from each of the lateral branches depends a chain to which formerly bells were attached. The local tradition concerning it is that it was created by some Tibetan Raja to whom this part of the country was formerly subject. A copy

[1] The original has here *dánava bhugala raja vetála vikramáditya*, which should mean "as Vikramáditya rules over Vetála, so he (Aneka) rules over Dánavas and Bhugalas." The '*bh*' of *bhugala* may, however, be read as '*m*' and so mean Mugala. The only tradition regarding the Mughals is that certain tombs lined with and covered by large tiles and stones have been found at Dwára and Bágeswar and are assigned to a Mughal tribe who are said to have held central Kumaon for twenty years. Harcourt notes that at different places in Lahúl old tombs have been found and the local traditions point to a people beyond Yárkand as the builders of these tombs. Ten years is assigned as the period during which they remained in that valley, during which time the Lahúlis took refuge in the upper heights and there cultivated and resided Kooloo, &c., p. 127. In Hunza too there is a tradition of a Mongol invasion (Biddulph's Tribes of the Hindu Koosh, p. 31) and the Maulái sectaries are called Muglee (p. 116). The earliest movement of the Mongols in force towards India took place in 1221 A.D. under Jingis Khán: see Howorth's Mongols, I., 50; Douglas' Life of Jenghiz Khán, London, 1877. Jingis Khán was born 1162, proclaimed chief of his horde in 1175 and died in 1227. It is not necessary, however, to connect these strangers with the Mongols of history as they may have belonged to the same race and have had given them the name subsequently best known. [2] The name may be read as Srí Bhaneka Malla. [3] J. A. S. Ben., V., 347, 485, and As. Res., XI., 477.



Ancient Inscription on the shaft of the Gopesvara trident, at A.

Modern Inscription, at B

Modern Inscriptions at C. and D

2. INSCRIPTION FROM BARAHAT IN GARHWAL.

Traill

J. Prinsep lith. from
Mr. Traill's native drawings.

of the inscription[1] was forwarded by Mr. Traill to the Asiatic Society in Calcutta and was partly decyphered by Dr. W. H. Mill with the following result:—It opens with the invocation '*Svasti, Sri,*' addressed apparently to a prince, and the first line contains the words '*yasya yatra harma yachchhringochchhritam dîptam,*' 'whose and where is a palace which is on a lofty peak and splendidly magnificent.' The second line of the inscription consists of a somewhat turgid verse which may be translated thus:—"His son whose ample condition was exalted by a numerous army, devouring the juices of the earth like the sun of summer, then arising sat on the throne, and even with his bow unbent, still ruled with sage counsels and that abandonment of all selfish passions. He was originally by name *Uddârackarita* (the man of generous deed), being skilled in all holy duties, did even thus at once, as the best of the lords of power, reduce to fragments the army opposed to him, through crushing all other adversaries, chariots and all." This is the whole of the second line. The third and the last which is in prose begins '*pûtahpûtasya,*' "the beloved son of a beloved father," and ends with the words:—'*tilakam yâvadanke pidhatta târatkîrttih sukîrtta yorakcharamatha tasyâstu râjnah sthiram*'—"as long as the sacred mark remains in the body, so long has the glory of these two illustrious ones (father and son) been concealed: but henceforward may the immortality of this king be unshaken." The meaning is not very clear and the word '*sukîrtta*' for 'illustrious' is unusual, if not semibarbarous, in its formation."

Gopeswar trident.

A second trident of iron stands in front of the Gopeswara temple having the ancient letters in copper soldered on in relief in the same way as that at Bárahát. The form of the letters shows them to be of the same age as those at Bárahát and they are accompanied by three or four short inscriptions in modern Nagri cut in the metal of the iron shaft.[2] Three of these are illegible or rather appear to be in some other language. Dr. Mill gives a

[1] Published as No. 2, plate IX., Vol V. of the Journal. [2] During a recent visit to Gopeswar I examined these inscriptions and found them now utterly illegible—E. T. A.

translation of the fourth, which, though it contains many errors, is in Sanskrit. The opening verse is in the same metre as that of the Bárahát inscription and records that :—" the illustrious prince Aneká Malla having extended his conquests on all sides, brought together (*quære*, humbled or made low) upon this holy spot sacred to Mahádeva, under the emblem of a pillar, the very sovereigns of the world whom his prowess had overcome "—" and thus having re-established this same pillar of victory, he acquired reputation. It is a pious act to raise up a worthy foe when he has been humbled." The figures taken from the plate given in the 'Journal of the Asiatic Society' show the shape of these tridents. A portion of the older inscription on that at Bárahát has been translated above and the inscription relating to Aneká Malla found at B. on the Gopeswar trident can refer only to the Aneka Malla of the Gopeswar inscription for whom we have a date. The older letters corresponding to those on the Bárahát trident must therefore be considerably earlier than the twelfth century and refer to an older dynasty than the Mallas.

Nepál trident.

It was evidently a custom of the hill rajas to erect tridents of metal in honor of Shiva as Pasupati. In the Nepál annals[1] we read that Sankaradeva caused a *trisúl* or trident of iron to be made which weighed a maund, and this " he placed at the northern door of Pasupati's temple and dedicated it to him," and there it remains to the present day. From the same source we are able to fix the country of this Malla Raja, the invader of Garhwál. The Malla Rajas of Nepál were deseended from Ansu Varma, who, according to the Chinese pilgrim Hwen Thsang, belonged to the Surajbansi family of the Lichchhavis of Vaisali near Patna. To one of them was born a son Abhaya, and on him the title 'Malla' or 'wrestler' was bestowed because his father was looking on at a wrestling match when the news of the boy's birth was brought to him. This Raja had two sons—Ananda Malla, who reigned in Bhaktapur,

[1] Wright's Nepál, 123: the name 'Malla' is also a family name of a dynasty of kings in the southern Marátha country.

and Jaya Deva Malla, who ruled over Pátan and Kántipur. Both these princes were expelled by a Kárnataka (Carnatic) dynasty and fled to Tirhút. Some of the family must have remained in Nepál for after a few generations we find that Raja Malla Deva and Kathya Malla of Pátan founded the village of Chápágaon and another Malla resided in Kántipur. When the Karnátaka dynasty came to an end and Nepál was divided amongst a number of petty Thákuri chiefs, the dissolution of authority was preceded by a revolt of the ministers, people and troops at Pátan, an event referred to the year 1191 A.D. by the local historians. Hari-Deva, the Karnátaka Raja of the time, endeavoured to suppress the revolt in its beginning, but he and his Kathmándu troops "were defeated and pursued as far as Thambahíl" and he never afterwards recovered possession of Pátan. We may therefore reasonably assume that the family of Jaya Deva Malla was never extinct at Pátan and that the leader in the successful revolt against the intruding Karnátakas belonged to the same family and that we have them again in the Garhwál inscriptions. The grant shows that Aneka Malla was a devout Buddhist and the Nepálese records also state that the Mallas were Buddhists. Aneka Malla was the conqueror of Garhwál and the sacred Kedár-bhúmi. He found the trident at Gopeswar and inscribed on it a record of his prowess. Gopeswar and Bárahát would appear to have been subject to the same dynasty whose principal town was Bárahát already known, as we have suggested, as the capital city of the kingdom of Brahmapura visited by Hwen Thsang in the seventh century. The sway of the Mallas in these parts can only have been of short duration, for with the exception of an old *chabútra* or masonry platform which formed their customs post at Joshimath and is still known as the Rainka's *chabútra*,[1] they have left neither trace nor tradition behind. It may be noticed also that in this record we have not the completeness of the older inscriptions either as to form or matter. Instead of having the heads of the civil and military departments and the chief of the scribes with their names and titles in full, the subscription is left to the nameless *Senápati* and *Senáni*, officers of an army in the field.

[1] The term 'Raika' or 'Rainka' is an old title in the Malla family and its branches to the present day.

Kráchalla Deva.

On the reverse of the copper-plate grant to the Báleswar temple made by the Katyúri Raja Desata Deva we have a confirmation of the deed by Kráchalla of the Jijikula who is described as conqueror of the '*Vijaya rájya*,' the destroyer of the demolished city of Kántipura and a devout Buddhist. The grant is dated from Dúlú, in the year 1145 Saka, corresponding to 1223 A.D. Now the Nepál annals tells us that when the Vais Thákur Rájas began to reign there were Rajas in every *tol* or quarter of the town in Lalitpátan; "in Kántipur (Kathmándu) there were twelve Rajas who were called *Jhinihmathakula*." Further, it is said that these Thákuras "left numerous Bauddha temples with lands assigned for their maintenance." The facts, the name of the family who conquered Kántipura and the date all corroborate the inscription, of which the following is a translation made by a Calcutta pandit:—

Translation of the inscription on the back of a copper-plate in the Báleswar temple in Súi.

Be this auspicious. The prosperous state of Bharauta.

The splendid Sirá ruling in heaven, ever strengthened by her victorious lord, having embraced the goddess of victory resplendent with her precious pearls, dropping from the skulls of her elephantine foes, who were dragged to battle, and killed and felled by the spears of her warriors, vincible only by the lord of heaven, a protectress and benefactress of cows and Brahmans. Her son was the great hero and king, Kráchalla, the most excellent, and chief of all who bear arms or are versed in the sciences, and who was ever inclined to (acts of) piety and charity. By his combat with elephants of newly sprouting tusks, with lance, sword, and ropes, Kráchalla, the lord of earth, became equally marvellous with the Pándavas. He was a devout *Saugata* (Buddhist), and shone like the sun on the lotus of the Jini-kula.[1] He was fierce in the strength of his arms, of marked valour, and entitled the most venerable, the lord supreme, and great king of kings, the prosperous Kráchalla Deva, lord of men, who, in the *Vijaya rájya* (realm of victory), now in his possession, has crushed the whole circle of his enemies with his own arms, and having destroyed the kings of the demolished city of Kártipura, (Kárttikeyapura) and established our right therein, inspected the lands bequeathed by its former kings, all of which, with their revenues, are all now made over to the highly deserving of homage Sri Báleswara, the sole Rudra * * * Bhatta Náráyana, a Bengali Brahmana (bangaja) * * * * *jagthebhyam* by means of this grant. Here is a couplet of the king's sister:—"The clouds with abundance of rain fill the mountains and rivers, but fame, the necklace of the world, stretches over the three worlds." The (following) is another couplet of the great queen:—"The quality of charity and other virtues is excellent, but more

[1] It may be read Jijarkula.

so is she who is addicted to her duties and ever faithfully devoted to her lord, for time is known to have a devouring head." The great king in council with his principal courtiers., *viz.* :—

Srí Yáhad Deva Mandalika,	Srí Vádya Chandra Mandalika,
Srí Srí Chandra Deva Mandalika,	Srí Jaya Sinha Mandalika,
Srí Hari Raja Ráutta Raja,	Srí Jíhala Deva Mandalika,
Srí Aniláditya Ráutta Raja,	Srí Vallála Deva Mandalika,
Srí Vinaya Chandra Mandalika,	Srí Musá Deva Mandalika,

having determined with his friends and ministers and well considered the matter as in duty bound, has given the aforesaid grant to the logician, tantrika, counsellor, saintly, forbearing, prudent, renowned in compositions of prose, verse, and poetry in this age of Káli, the poet, connoisseur of the purport of works (books), skilled in the calculation of horoscopes and the like, the son of Nanda, conversant in augury, and renowned in the world. The limits and boundaries thereof being Svaháragádi on the east, as far as Kahudakota on the south; as far as Talakota on the west; and as far as Ladhául on the north. This spot thus bounded on the four sides, and situated in the Srí Kona Desa (corner land), with the mines, valleys and jungles, together with all products thereof, are given over by me by means of this grant, and for its continuance coeval with that of the sun and moon.

(*Verses.*)

All the mighty (princes) who from time to time shall be born in my race, let them as well as other masters of land preserve this (for ever). The donor of lands gains (the favours) of Aditya, Varuna, Brahma and Vishnu, as also of Soma, Hutásana, and the god holding the trident in his hand. When the lands (possessed by) Dilípa, Nripa and Nahusha have been left behind, they shall never accompany any other monarch (on his demise). Lands have been bequeathed by various kings, beginning with Ságara. Whoever becomes master of land at any time, he reaps the produce thereof. He who receives lands as well as he who grants the same both become meritorious and both in heaven remain. Whoso resumes lands, whether given by himself or another,

As a filthy worm for sixty thousand years doth pother ;
Whoever steals a gold coin, resumes a villa, or an inch of ground,
Shall dwell in hell as long as offerings are drowned.
No gift is equal to the grant of land, no wealth equal to gift,
No virtues greater than truth, nor sin than falsehood's shift.
The king, one's life, strength and gods deserve most to be regarded by all.

So long as the possessor of the place where the lotus loves to exist of the auspicious Kráchalla-deva wanders on the earth, so long may the lotus-abode of the chief of the Kirántis[1] (flourish)—(*Srimat Kráchalladevasya yávat ambhyajinípati vikaratu bhuvi távat kiráttirasya nripakumudákara*).

[1] The text of this passage is doubtful and seems to read तावत्कीर्त्तिरस्य नृपकुमुदाकर There is one '*i*' too much, but the reading to be preferred seems to be that given in the text. Kírttira perhaps could refer to himself as lord of Kírttipura.

And long as the lord of stars spins on the head of the god holding the Pináka bow, and his dreadful braids of hair are moistened by Ganga's stream.

What was the holder of the Gándíva bow—merely possessed of valour? What was the son of Dharma? What is the lord of wealth? What was Rámabhadra the mighty, and what was Kudarpa too before him? No, never were they such, neither in this manner nor in that, as the famed Kráchalla, who is as a gem on the crowns of all the rulers of earth.

In beauty he resembled the moon and Ratipati.
To the indigent he was the Kalpa-tree.
In valour he was in quality like the gem of Raghu.
In the assemblage of all the qualities he was Bhavánípati.
In bowmanship he was a Ráma or Bhíshma himself.
In justice he was as if born of Dharma.
Kráchalla was a destroyer of his elephantine enemies in the Káliyuga.
Let our allies, abiding in firm amity, meet with prosperity,
And let the rulers of earth govern her with justice throughout the year.
Let the four articles of polity remain steady with you as a new-married bride.

And let the god having the semi-bow as a gem on his crest confer good fortune on mankind. Dated 1145 of the year of the Saka king, the 2nd day of the waning moon of Pausha, Monday, asterism of Pushya. The moon in Cancer, and the sun in Sagittarius; and Saturn following him; Mars in Virgo; Jupiter and Mercury in Scorpio; Venus in Aquarius; the ascending node in Aries; and the descending node in south-east. Written in the prosperous city near Dúlú. Welfare to all worlds!

This inscription throws valuable light on the period to which it relates. Kráchalla was a member of the Jina family who belonged to the hill Rajpút race and who conquered and held the town of Kántipura in Nepal. He was a devout Buddhist, as the name of his family would alone show, the word '*jiná*' being a generic term applied to a Buddha or chief saint of the Bauddha sect in the same manner as to a Jaina saint; still he was liberal enough, as Buddhists generally were, to confirm the grant to the temple of the local deity Bálesvar. The names of the Mandalikas or local chiefs contain those of two Ráwat Rajas evidently of the same clan as the chief of Domkot, and the names Jíhala and Jaya may be compared with the names of the Khasiya Rajas Jáhala and Jaya. It is worthy of note that three of the Mandalikas have the tribal affix Chandra, the same as that borne by Som Chand's family. It would also appear that the Tantras, those marvellous combinations of the ritual of the worship of the female energies, necromancy and mysticism, were held in high repute.

The donee is praised for his skill in these matters and his proficiency in literature in general. The identification, in the verse, of Kráchalla with the chief of the Kiráutis has a shade of doubt about it owing to the error in the copy which prevents its being made a subject of speculation. The identification, however, is neither impossible nor improbable. Dúlu is a district in the west of Nepál and was in the last century the seat of an independent kingdom.

Chand restoration.

At the outbreak of the revolution the surviving members of the Chand family retired to the Mal or Malás as the present Tarái was then called. When wearied with the new order of things the people resolved on obtaining a king to rule over them, Bíra Chand was put forward by one Saun Kharáyat as a relative of Sonsár Chand. The exiled Brahmans and Rajpúts and all who were dissatisfied with the rule of the Ráwats and Mandalikas rallied round the young Chand and joined him in an attack upon Káli Kumaon in which they were completely successful. The Khasiya Raja Sonpál was slain and Bíra established himself at Champáwat. He is said to have rearranged the relations of the Máras and Phartiyáls and to have recalled the Joshis to office as a reward for the aid that they gave in his restoration. From Bíra to Garur Gyán Chand the local traditions throw no light on the history of the country and merely furnish a bare list of names and the single remark that Triloki Chand annexed Chhakháta to Kumaon and built a fort at Bhím Tál to protect the frontiers towards Páli and Bárahmandal, where the Káthis and Katyúris still held independent sway. We have collected some forty inscriptions relating to this period, but in some of them the dates are wanting and in others the names, whilst the barbarous Sanskrit in which they are written and the numerous *lacunæ* render them of little service to our purpose. They consist chiefly of inscriptions on temples and wells and rest-houses, but from them the following facts may be gathered. A branch of the Katyúri dynasty still ruled in the Dánpur parganah and their capital was at Baijnáth (Vaidyanáth) still called Kárttikeyapura in the inscriptions. Two of these of considerable length are found on a *dhára* or masonry well much worn, however, by the trickling of

water over the stones on which they are inscribed. They furnish us with the names Udayapála Deva, Charunapála Deva, and fragments of other names record the grants of certain quantities of grain from Chandoli and other villages for the service of the temple of Vaidyanáth. The names Agapara Deva, Jhakátha (Ijkátha) Deva and Mahípála may also be read, but the date has unfortunately been obliterated. A copper-plate in the possession of Haridatta Tripáthí of Darimthauk in Patti Talla Katyúr records the grant by Indra Deva Rajbár in the year 1202 A.D. of certain lands which were registered before Badrináth, the temple of that name at Bageswar. Rajbár was the name given to the heir-apparent amongst the Katyúris. On an image of Vishnu in one of the old temples at Baijnáth occur the names Srí Jahála, son of Thaupála, and in another temple the words "the Rawal of Kakarála" with the date 1499 A.D., and again on an image of Ganesha, the name Kádáru Parasíyo with the date 1322 A.D., and the date 1203 A.D. also occurs elsewhere. From these inscriptions we may infer that the valley continued to be inhabited during the period and that the Katyúris still resided there. Another branch of the same family occupied Dwára and held possession of the valley of the Rámganga. We have an inscription from the temple of Goril near Ganai dated in 1219 A.D. apparently inscribed by one Thapuwa Ráwat. On the Dunagiri hill above Dwára there is another dated in 1181 A.D., and in Dwára itself one of Ananta Pála Deva on the image of Kálika dated in 1122 A.D. Another inscription on a *naula* or well at Dwára records its construction in 1214 A.D. by Asadhata Tripáthi. Beyond these few dates and names the inscriptions collected afford no information, and they are given here merely in the hope that future researches may throw some light on what is at present an unconnected series of dates and doubtful names.

Musalmán historians.

On turning to the Musalmán historians we find very little more assistance, for their geography is so vague regarding countries with which they had little intercourse that it is often difficult to discover what is intended. The earliest express mention of Kumaon that we have been able to discover is given by Yahya bin Ahmad,[1] who records that when

[1] Dowson's Elliot, IV., 15: VI., 229.

Khargu, the Katehiri chief who murdered Sayyid Muhammad of Budaun, fled before the arms of Sultán Firoz Tughlak in 1380 A.D., he took refuge in the mountains of Kumaon in the country of the Mahtas, who were attacked and defeated by the Sultan. The name Mahtas probably refers to the Mewatis who occupied the Tarái along the foot of the Kumaon hills. The annual raids of the Musalmán governors against the Hindus of Katehir must have sometimes brought both parties in contact with the hill-tribes, but of this little record remains.[1] The same writer relates[2] that in 1418 A.D. Khizr Khán sent a considerable force across the Ganges to invade Katehir and chastise the rebel Raja Hari Singh. The latter after an ineffectual resistance fled towards the mountains of Kumaon, pursued by twenty thousand horse, who crossed the Raheb (Rámganga) and followed the enemy into the mountains. Hari Singh pressed forward towards the snows and on the fifth day the royal forces, disheartened by the difficulties of the country, retired after having secured great spoil. It is also recorded[3] that in 1424 A.D. Sayyid Mubárak Sháh proceeded to Katehir and on reaching the Ganges was met by Hari Singh, who paid his respects. The royal army then crossed the Ganges and, having chastised the recusants of the neighbourhood, proceeded to the hills of Kumaon. There they stayed for a time, and when the weather became hot marched homewards by the banks of the Raheb From these casual notices, however, we may gather that the Hindus of Katehir[4] were gradually giving way before the Musalmáns and pressing back towards the hills must have encroached upon the possessions of the hillmen.

Garur Gyán Chand.

This suggestion is supported by the statement in the local traditions which informs us that at this time the plains had entirely passed away from the Chands, and that Gyán Chand on his accession to the throne deemed it to be his first duty to proceed to Dehli and to petition the Emperor for the grant of the tract along the foot of the hills which had of old belonged to the Katyúri Rajas. He was received with much honor and, being permitted to accompany the Emperor whilst hunting, was one day fortunate enough to shoot

[1] For an account of these raids, see the history of the Bareilly District in Gaz., V., 640. [2] Elliot, *l. c*, 59. [3] *Ibid.*, 61. [4] Now restricted to the tract lying between the Rámganga, Sárda and Khanaut rivers.

a large bird which he saw flying away with something in its talons. The bird proved to be a vulture, the *garur* or *garuda*, the bird and carrier of Vishnu, which had been carrying away a great snake. The Emperor was so pleased with the Raja's skill that he not only granted his petition to have and to hold the land lying along the foot of the hills as far as the Ganges, but directed him henceforth to assume the name of Garur Gyán Chand. The Raja returned to Kumaon and took possession of the present Bhábar and Tarái. As this Raja reigned from 1374 to 1419 A.D. he may have met either Mahmud Tughlak when he came on a hunting expedition to the foot of the hills in 1410 or 1412, or Daulat Khan Lodi, who paid a similar visit in the following year. However this may be, the Madhawa-ke-mal, corresponding to the Tallades Bhábar, was shortly afterwards seized and occupied by the Musalman governor of Sambhal. Gyán Chand despatched a force against the intruders under his favourite officer Nalu Kathayat, who expelled the Musalmans and recovered the entire tract. Gyán Chand recognized the services of Nalu by presenting him with a dress of honor (*kumáya siropo*) and a *sanad* conferring on him the possession of several villages in the Bhábar and twelve *jyúlas* of land in Dhyánirau in tenure of *rot*,[2] besides carving a tablet to be inscribed and set up in Nálu's own (*thát*) village of Kapraoli commemorating his success and ability in the campaign against the Mlechchhas.

Revolt of Nalu.

These unusual honors gave offence to one Jassa of Kamlekh, a favorite servant of the Raja, and he took means to poison the mind of his master against Nalu. The first consequence was that Nalu was ordered to proceed to the Bhábar and reside there as governor. The climate was then as now malarious in the extreme and unfit for a prolonged residence, and Nalu without putting on his dress of honor resolved to seek an interview with the Raja and protest against his being sent to the Mal. Jassa saw him coming and told the Raja that Nálu was intentionally disrespectful in coming to the interview

[1] Dowson's Elliot, IV., 45, 44. [2] The term '*rot*' was applied to land granted by the Raja to the families of persons who had perished in his service, and when given to a living man was held to express the Raja's opinion that the man had done such deeds of bravery that it was wonderful that he survived: consequently the grant of land in '*rot*' was considered one of the most honourable rewards that a man could receive. The ordinary form of grant in reward for services was in *jágír*.

without permission and without wearing the dress that had been given him and so aroused the Raja's anger that an audience was refused and Nalu was sent away in disgrace. His wife, a Mára lady of Sirmola, thereon sent her two sons Súju and Baru to induce their uncle, the chief of the Máras at Champáwat, to make peace between Nalu and the Raja, but the lads missed their way and fell into the hands of Jassa, who induced the Raja to believe that they had arrived with the intention of murdering him. The Raja ordered the boys to be thrown into prison and there blinded them. When news of this event came to Nalu's ears he roused the Márás throughout the country and attacking the Raja, captured Jassa, whom he slew. He then sacked Jassa's village and fort of Kamlekh, the ruins of which exist to the present day. The Raja was spared by the conqueror but ill requited their generosity by causing the death of Nalu, some time afterwards. This episode of Nalu shows that the rivalry of the several factions had not diminished and that it was dangerous for even the Raja to offend the chiefs of the parties. Gyán Chand died in 1419 A.D. after a reign of 45 years and was succeeded for a few months by his son Harihar Chand. It is now time that we should take some notice of Garhwál and the Dún.

Garhwál and the Dún have no written history of their own and the traditions preserved regarding them are of the most meagre and unsatisfactory nature. We have been able to gather little more than a list of names with a few dates for the earlier history of Garhwál. The eastern Dún appears to have been settled at a very early period, at least that portion of it which adjoins the Tihri frontier near Tapuban. All along the foot of the inner range westwards are traces of Banjára colonies and the names Banjárawála, Fatehpur Tánda and the like must doubtless be referred to them. Until we come to the later Musalmán historians we have nothing to say about this tract, and even then the information is scant and uninteresting. Garhwál from an early period would seem to have been broken up into numerous petty states. We have seen that the Malla Raja Aneka Malla visited Gopeswar and Bárahát in 1191 A.D., and in 1209 A.D. Sonapála[1]

Early history of Garhwál and the Dún.

[1] He was the ninth Raja before Ajai Pála, but the original of his inscription is not forthcoming, nor could my informant, a Brahman of Srinagar, tell me where it was to be found.

was Raja of the Bhilang valley, but how far his authority extended is not known. Ajaipála transferred the seat of government from Chandpur to Dewalgarh in the fourteenth century and is held to be the first who attempted to bring the scattered states "under one umbrella." Much error has arisen from assuming that the name 'Siwáliks' used by the Musalmán historians must necessarily refer to the outer range of the Dún which separates it from the plains, and a brief consideration of its signification in the earlier histories will not be out of place here.

Siwálik hills.

The name Siwálik hills seems to have been assigned to different tracts at different times by the Musalmán historians. We learn that in 1119 A.D. Báhalím built the fort of Nagor in the Siwálik hills, in the vicinity of Bera, which leads us to about sixty miles north-west of Ajmer. One of the results of the defeat and death of Prithiráj was that his "capital Ajmír and all the Siwálik hills, Hánsi, Sarsuti and other districts" fell into the hands of the Musalmáns (1192 A.D.) The fort of "Mandúr (Jodpur) in the Siwálik hills" was captured by Shamsuddín in 1227 A.D., and in 1225 we find Ulugh Khán hastening to Hánsi in order to assemble the forces of the Siwálik hills that were under his orders and refit the army of Mewát and the Koh-páya (hills). Here the name is clearly applied to the Aravalli range and Koh-páya to the foot of the hills towards the Himálaya. Shortly afterwards we hear of Ulugh Khán ravaging "the villages in the district of Hariána, the Siwálik hills and Bayána," a statement which further corroborates our determination of the hills south-west of Dehli as the tract at this time indicated.[1] The first mention of the Siwálik hills in connection with the Dún is in Tímúr's account[2] of his campaign in India. He fought several battles near Hardwár[3] and the Chándi hill and then invaded the country of Raja Bahrúz which lay in a valley between the Ganges and the Jumna. After crossing the Ganges from the Bijnor district, Timúr marched 'several *kos*' and then halted. The following day he marched six *kos*, and whilst resting during the heat of the day heard that an immense number of Hindus had collected in the Siwálik hills,

Tímúr, 1398 A.D.

[1] Dowson's Elliot, II., 279, 297, 325, 375. [2] *Ibid.*, III., 461, 513.
[3] For some account of these battles, see Gaz., II., 246. Bahrúz is subsequently said to be inferior in rank and power to Ratan Sen, Raja of Sirmor.

When he received this information he gave orders for his entire forces to proceed at once towards the Siwáliks. Marching during the same evening and night, the troops accomplished five *kos* and encamped in the hills. Here Tímúr held a council of war and having disposed of the objections of those who wished to dissuade him from his purpose, despatched a body of horse to call in the detachments that had been sent to plunder the towns along the Jumna and directed every one to prepare for the expedition. The troops from the Jumna joined the head-quarters next day and on the following day all marched towards the Siwáliks. The distance travelled from the Ganges and the description given of the country point to the Mohan pass as the route taken by Tímúr in his invasion of the Dún. Timúr himself informs us that from his inquiries he learned that the people of Hindustán computed this mountain region at one and a quarter lakh and that it had narrow and strong valleys. "In one of these valleys (*darra*) was a *Ráí* named Bahrúz, the number of whose forces and whose lofty, rugged, narrow and strong position made him superior to all the chiefs of the hills and, indeed, of most of Hindustán. At the present time especially he, having heard of my approach, had done his best to strengthen his position and all the malignant *ráis* of the country had gathered around him. Proud of the number of his men and soldiers, the height of his *darra* and abode, he stood firm, resolved upon fighting." Having marshalled his army and directed the drums to be beaten and the instruments to be sounded as it approached the valley Tímúr proceeded to the mouth of the *darra*, where he alighted from his horse and sent on his officers and men. "They all dismounted and girding up their loins marched forward to the conflict full of resolution and courage. The demon-like Hindus were lurking in places of ambush and attacked my soldiers, but these retaliated with showers of arrows and falling upon them with the sword forced their way into the valley. There they closed with them and fighting most bravely they slaughtered the enemy with sword, knife and dagger." The Hindús fled, some hid themselves in holes and caves and others were taken prisoners. An immense spoil in money, goods, cows, buffaloes, women and children fell into the hands of the victors, who returned to their former encampment the same night. The next day they marched about

five *kos* to Bahrah and thence, the following day, to Sarsáwah. Tímúr can hardly have penetrated beyond the head of the pass near Shorepur, where tradition places an old town and fort, and certainly not farther than Kiligarh (Kaulágarh), which was the capital in 1654 A.D., or Nawáda, the old capital on the Nágsidh hill some five miles south-east of Dehra. The name Hurdíz occurs in Musalmán histories for Hardat or Haridatta and the name Bahrúz may well stand for Brahmdat, and was probably that of some local chief like the name Chhatarbhuj which occurs hereafter and neither of which are found in the Garhwál lists. Local tradition assigns to a Ráni Karnávati and Abju Kunwar several works in the Dún of ancient date and amongst them the Rájpur canal. Their palace was at Nawáda,[1] and to them are assigned what were then important villages, *viz.*, Ajabpur, Karnápur, Kaulaghar, Kyárkuli, Bhátbír and Bhogpur. Other towns that have a reputation for an existence of at least two hundred years are Sahanspur, Prithipur, Kalyánpur, Nágal, Rájpur, Bhagwantpur and Tháno. Prithipur especially contains remains of a fort, temples and *sati* monuments betokening former importance and is said to have been the residence of Chanda or Jhanda Miyán.

Garhwál Rajas.

On a previous page we have given a list of the Garhwál Rajas and the dates which we have been able to assign to them from existing records. The earliest reign thus dated is that of Man Sáh, of whom we possess a grant inscribed in 1547 A.D. The local traditions say that Ajaya Pál was the first to leave the family home in Chándpur and settle in Dewalgarh, whence the capital was transferred to Srinagar by Mahipati Sáh, of whom we have an inscription on the monastery of Kesho Rái in Srinagar itself dated in 1625 A.D. General Cunningham[2] assigns the founding of Chándpur to the year 1159 A.D. and the founding of Srinagar to 1358 A.D. Other local accounts place Ajaiya Pála in 1359, 1376 and 1389 A.D. Taking the date 1358 as having quite as much authority as any of the other three we have fourteen reigns between him and Mán Sáh and 189 years, and deducting fifteen years for the concluding portion of Ajaiya Pála's reign and the opening years of Mán Sáh's reign we have an average of twelve years for each reign, a fair result for the time

[1] Williams' Memoir, 94. [2] Anc. Geogh., p. 356.

and country. Up to the time of Ajaiya Pála, Garhwál was divided amongst a number of petty Rajas. Every glen or hill, as formerly was the case in the highlands of Scotland, was subject to its own chiefs who have left no record behind except the moss-covered walls of their strongholds. And although Ajaya Pála is credited with having reduced fifty-two of these petty chiefs under his own rule, we may well suppose that he was only the first of his line to aim at more than a local supremacy, and that to his successors is due the extension of the Garhwál power over the Dún, Bisahir and the tract now known as Tihri or foreign Garhwál. Indeed, Mahípati Sáh, the founder of Srinagar, is often said to be the first Raja of the line who attained to any real independence. It is not therefore necessary that the Bahrúz or Brahmdat of Tímúr's narrative should have any connection with the line of Garhwál Rajas. We have a grant of Dularám Sáh dated in 1580 A.D., and he was the immediate predecessor of Mahípati Sáh, and from his time the dates are ascertained by the aid of contemporary records.

We shall now return to the Chands of Káli Kumaon. Udyán Chand succeeded his father Harihar in 1420 A.D., and impressed with the heinousness of his grand-father's crimes sought every opportunity to appease the wrath of the gods. He restored the great temple of Báleswar dedicated to Mahádeo and invited a Gujráthi Brahman to consecrate it, whose descendants afterwards helped to people the new capital at Almora. He also remitted a full year's dues from the land and relieved the poor whenever they came before him. Not satisfied with this, he set his troops in motion and captured successively the forts held by the Padyár Raja of Chaugarkha, the Raja of Mahryúri and the Raja of Bisaud. His possessions therefore extended from the Sarju on the north to the Tarái on the south and from the Káli westwards to the Kosi and Súwál. To the north of the Sarju lay the estates of the Mankoti Raja of Gangoli, and the Maháraja of Doti held Síra, Sor, Askot and the Bhotiya valleys of Juhár and Dárma. The Raja of Jumla ruled over Byáns and Chaudáns, and Katyúri Rajas were established in Katyúr, Syúnara and Lakhanpur of Páli. A Káthi Rajpút still held Phaldakot and a Khasiya family ruled in Rámgár and Kota. Udyán

Udyán Chand, 1420—21 A.D.

Chand reigned only one year and was succeeded by his son Atma and grandson Hari, each of whom reigned but one year.

Vikrama Chand, 1423—1437 A.D.

Vikrama Chand succeeded his father Hari in 1423 A.D. and carried out the restoration of the Báleswar temple commenced by Udyán Chand. The same grant that records the devotion by the Katyúris to that temple and the confirmation by Kráchalla Deva bears a further record that in 1345 Saka, corresponding to 1423 A.D., Vikrama Chand confirmed the grants of his predecessors. The record is brief and may be thus translated:—

Inscription on the Báleswar copper-plate grant.

Om May it be auspicious. In the Saka year 1345, on the lunar day of Vishnu of the bright fortnight, in the asterism of Deva, in the month of Asháriha, in the day of Vishnu's repose (*sayane*) in the north. The lord of earth and gem of crowns, observant of a vow, hath given the land in * * Champíwat in the district called Kúrma to Kunjesarmma Brahmin and Máyáseri * * * The lord of the earth Vikrama Chandra is a true Kalpa-druma, whose sword has brought a train of the rulers of men into his service, who has bestowed all the lands given by Kráchalla on the indigent and is resolved to repair the ruins as Hari delivered the earth from the abode of snakes (the sea). The witnesses here are Madhu, Sejyála, Parbhú, Vishnu, Jadumadgani, Vira Sigha Ganbhári, and Jailu Bathyál. Written in the *Patnavísi*[1] office by Rudra Sarmana. May it be well. Raichu * * Rámpántani made this deed.

The date agrees with that assigned to Vikrama Chandra in the lists, and it would appear that he carried out the intentions of Udyán Chand in regard to Báleswar which was undertaken in expiation of the crime committed by Gyán Chand. We have another grant of this prince assigning a village to Kulomani Pánde in 1424 A.D. Towards the close of his reign he neglected the affairs of the state and gave an opportunity to his nephew Bhárati to raise the standard of revolt and draw to himself the Khasiya population. The leader of the Khasiyas was one Shor, a man of bold and determined character, who expelled Vikrama Chand and raised Bhárati Chand to the throne, and received the village of Malasgaon in reward for his services.

Bhárati Chand, 1437—1450 A.D.

Bhárati Chand must himself have been a man of considerable force of character, for during his short reign he continued the series of encroachments

[1] The existence of this word shows an imitation of Muhammadan procedure which indicates a more intimate connection with the plains than the records disclose. The word for office, '*chárathán*,' would also justify a similar remark.

which Gyán Chand commenced and which ended in the consolidation of the entire province under the Chand rule. The Rainka Raja of Doti of the Malla family had for generations been acknowledged as suzerain of the Káli Kumaon district, and a younger branch of the same family with the title of Bam Sáhi[1] held almost independent control of Síra and Sor on the left bank of the Sarju. It was against them that Bhárati Chand first directed his arms. Raised to power, as it were, by the popular will, he was enabled to collect a large and serviceable body of followers with whom he invaded Doti every year and, fixing his camp at a place called Báli Chaukúr, conducted plundering operations over all the neighbouring territory. Never before had a Kumaoni force remained so long in the field, and the soldiery unable to return to their homes contracted temporary alliances with the women of the place, a practice formerly unknown and hitherto deemed contrary to the usages of the Hindus. These women were called Khatakwáli and eventually gave rise to a separate caste and to such a degradation of the military caste in Hindu eyes that the hill Rajpút is now considered a mere Khasiya though he may have been descended from settlers from the plains of pure lineage. When the war had lasted for twelve years, Ratan Chand, the son of Bhárati Chand, who had been left in charge of Káli Kumaon, having received aid from the Raja of Katehir, collected a large reinforcement and joined his father in time to take part in a general action in which the Rainka Raja was defeated. Doti was plundered and the Rainka agreed to relinquish all pretensions to any claim over the Chand possessions. Bhárati Chand was so pleased with his son's energy and valour that he gave him pargana Chaugarkha as an appanage in *roi*[2] and eventually abdicated in his favor in 1450 A.D. There is a deed of this prince in the Almora archives recording a grant of land to one Rámakanth Kuleta in 1445 A.D. Bhárati Chand died in 1461 A.D.

Ratan Chand succeeded his father under very favorable conditions. He found the little *ráj* of Káli Kumaon respected by its neighbours, and

Ratan Chand, 1450—1488 A.D.

[1] The term Malla Sáhi was given to the junior members of the reigning family in Doti, the head of which was known as the Rainka Raja, and he allowed the petty princes who paid him tribute to bear the title of Raja. Thus the Chands were Rajas of Champáwat and called their fortress Ráj-búnga, but allowed no one subrdinate to them to call themselves Raja. [2] See page ; footnote.

believing that much of this good fortune was due to the protecting power of the great deity of Jageswar, he, while visiting his fief of Chaugarkha, paid his devotions at the temple and endowed it with several villages. He then made a tour through the outlying patt's of his *ráj* and formed a settlement with the resident cultivators and so arranged his affairs that, it is said, the first real attempt at administration should date from his reign.[1] His father died in 1461 A.D., and about this time the Rainka Raja again made an effort to reassert his supremacy over Káli Kumaon. Ratan Chand, however, was prepared for the emergency and assembling an overwhelming force invaded Doti. The reigning Raja was Nága Malla, who had overthrown the Sáhi dynasty, and the followers of the old family who had fled for protection to Champáwat now assisted the invaders. Ratan Chand defeated and slew Nága Malla in battle and restored the country to the Sáhi Raja. Taking advantage of is position he penetrated as far as Jumla, Bujáu[2] and Thal, then held by Jagarnáth Bhat, Kharku Singh Mubara and Shor Singh Muhara respectively, and compelled each of them to tender his submission and agree to pay an annual tribute of one pod of musk, a bow, a quiver full of arrows, a hawk and a horse to the Raja of Káli Kumaon. This arrangement was faithfully carried out until the absorption of those states by the Gorkháls in the middle of the eighteenth century. On returning from Doti, Ratan Chand invaded Sor, then held by the Bam Raja of the Doti family, residing in Udepur near Pithoragarh and also at Bilorkot in the cold weather. Ratan Chand was again successful and Sor was for a time annexed to Káli Kumaon.

Pedigree of the Doti family and their branches.

The Doti family give the following pedigree which will be of use for comparison with other sources of information.

Pedigree of the Doti family.

1. Sálivâhana deva.	6. Vikramáditya deva.	11. Sumura Sinha deva.
2. Shaktiváhana deva.	7. Dharmpála deva.	12. Ashala deva.
3. Harivarma deva.	8. Nilapalá deva.	13. Sárangya deva.
4. Srí Brahma deva.	9. Munjarája deva.	14. Nakula deva.
5. Vajra deva.	10. Bhoja deva.	15. Jai Sinha deva.

[1] Ratan Chand introduced thefive Rajpút clans known as Pánch Purbiya into Doti, *viz.*,—Surari, Deopa, Púrchúni, Paderu and Chárál. [2] The names of the following Rajas of Bujáu are recorded:—Uttam Singh, Raghunáth Singh, Siuráj Singh, Indra Singh, Ratan Singh, Mahendra Singh, and Gajráj Singh, who was alive in 1850.

Pedigree of the Doti family—(concluded.)

16. Anijala deva.
17. Vidyarája deva.
18. Prithivesvar deva.
19. Chunapála deva.
20. Asanti deva.
21. Básanti deva.
22. Katár Malla deva.
23. Sinha Malla deva.
24. Phani Malla deva.
25. Niphi Malla deva.
26. Nílaya Rái deva.
27. Vajrabahu deva.
28. Gauranga deva.
29. Síya Malla deva.
30. Ilráj deva.
31. Nílráj deva.
32. Phatak Silrája deva.
33. Pithiyarája deva.
34. Dhám deva.
35. Brahm deva.
36. Trilokpála deva.
37. Niranjana deva.
38. Nága Malla deva.
39. Arjuna Sáhi.
40. Bhupati Sáhi.
41. Hari Sáhi.
42. Rama Sáhi.
43. Pabar Sáhi.
44. Rudra Sáhi.
45. Vikrama Sáhi.
46. Mandháta Sáhi.
47. Raghunáth Sáhi.
48 Hari Sáhi.
49. Krishna Sáhi.
50. Dípa Sáhi.
51. Vishnu Sáhi.
52. Pradípa Sáhi.
53. Hansadhvaja Sahi.

The Sáhi dynasty are descendants of Arjuna Sáhi, who was a contemporary of Ratan Chand. For the Askot pedigree we have a list from the present Rajbár of Askot recounting his descent in 221 generations from Srí Uttapannapatra, the founder of the solar dynasty, through Brahma, Mrachí (*sic*), Kasyapa, &c. Opposite the name Sáliváhan is the note that he came from Ayodhya and established himself in Katyúr. Commencing with him the following names are recorded :—

Pedigree of the Askot family.

1. Sáliváhana deva.
2. Sanjaya
3. Kumára
4. Haritriha.
5. Brahma deva.
6. Saka.
7 Vajra deva.
8. Vranajaya.
9. Vikramájíta.
10. Dharmapála.
11. Sárangadhara.
12. Nilaipála.
13. Bhojarája.
14 Vinaipála.
15. Bhujanra deva.
16. Samarasi.
17. Asala.
18. Asauka.
19. Saranga.
20. Naja.
21. Ramajaya.
22. Sálínakula.
23. Granapati.
24. Jaisinha deva.
25. Sankasvara.
26 Sanesvara.
27. Krásidídhya.
28 Vidhirája.
29. Prithiveswar.
30. Balakadeva.
31. Asanti.
32. Básanti.
33. Katár Malla.
34. Sotadeva.
35. Sindha.
36 Kina.
37. Ranakína.
38. Nila Rai.
39. Vajravahu.
40. Gaura.
41. Sadila.
42. Itiurája.
43. Tilangaraja.
44. Udakasila.
45. Prítama.
46. Dhám.
47. Brahm deva.
48. Trilokpála.
49. Abhayapála.
50. Nirbhaipála.
51. Bhávatipála.
52. Bhairaunpála.
53. Bhúpála.
81. Ratnapála.
82. Sankhapá a.
83. Syámapála.
84. Sáipála.
85. Surjanpála.
86 Bhújayapála.
87. Bhartapála.
88 Sutatipála.
89. Achhapála.
90. Tilokapála.
91. Surapála.
92. Jagatipála.
93. Pirojapála.
94. Ráipála.
95. Mahendrapála.
96. Jaintapála.
97. Bírbalpála.
98. Amarasipála.
99. Bhramaipála.
100. Uchchharapála.
101. Vijaipála.
102. Mahendrapála.
103. Bahádurpála.
104. Pushkarapála.

Opposite (49) Abhayapála is the note that he left Katyúr for Askot in 1279 A D. and after (53) Bhupála the note that twenty-eight generations, regarding whom there is no record available, intervene between him and Ratanapála. Rudradatta gives a list

from (46) Dhám deva, which will assist in applying the necessary corrections to the Rajbár's list:—

1. Dhám deva.	11. Suraj pála.	21. Mahendra pála.
2. Brahm deva.	12. Bhoj pála.	22 Jaintha pála.
3. Asana deva.	13. Bhadra pála.	23. Birbala pála.
4. Abhaya deva.	14. Siuratan pála.	24. Amara Sinha pála.
5. Nirbhaya pála.	15. Achha pála	25. Abhaya pála
6. Bhárati pála.	16. Trailokya pála.	26. Uchchhava pála.
7. Bhairava pála.	17. Sundara pála	27. Vijaya pála.
8. Ratana pála.	18 Jagati pála.	28. Mahendra pála.
9 Syáma pála.	19. Piroja pála.	29. Himmat pála.
10. Sáhi pála.	20. Rai pála	30. Daljit pála

Next follows Bahádurpála as in the previous list. There is nothing to lead one to suppose that there should be such a large interpolation as 28 generations necessary in this list. The title Rajbár was, as we have already suggested, that of the junior princes of the Katyúri family, and we have seen that it was early used, for in 1202 A.D. there is a grant by Indradeva Rajbár of lands in the Katyúr valley. Abhaya deva was the first to leave the valley for Askot, and the date fits in well with the time of uncertainty and revolution which marked the decline of the Katyúri power. He changed his title from '*deva*' to '*pála*' because the first belonged to the branch ruling in Katyúr. The title Rajbár now belongs solely to the head of the Askot house, whilst the eldest son is called Lala and the younger son Gosáin.

Bam Rajas of Sor.

The Bam Rajas of Sor, though nominally subject, were gradually founding an hereditary kingdom when interrupted by Ratan Chand. A curious story is told of one Jainda Kiral, who was settlement officer to one of these princes. Jainda measured the cultivated and culturable land and assessed each according to its value and recorded the demand against every cultivator in a series of volumes which were placed in the record-room of the Raja. The people therefore disliked him exceedingly, and when once he was sent to a distant part of the country to reduce some refractory villages to submission, his enemies resolved to do something that would vex him terribly. The plan which was adopted was to feign that Jainda had died in battle and so induce his widow to burn herself as a *sati*. The report was duly made to the wife of Jainda and was supported by corroborative evidence and she believed it, and inconsolable for her loss declared her determination to sacrifice herself. In

this resolve she was encouraged by all around her, who further suggested that she should ascend the funeral pyre with all the precious records that her husband had collected and so laboriously compiled and thus perform an act not only meritorious in itself, but one that would be specially pleasing to the spirit of her husband, who would thus in the next world possess all that he held most precious in this world. To this the infatuated woman consented, and thus the settlement records of the Sor *ráj* fed the funeral pyre of the wife of their author. Hence the proverb still current :—

"Mari gayo Jainda jalái halu bai,
Jusi jusi Suryál kaune tusi tusi bhái."

'Jainda died and his records (*hala*) were burned and everything turned out as the Sor folk said." The names of the following Rajas of this family are recorded :—Karákil, Kákil, Chandra bam, Harka bam, Ani bam, Sagti bam, Vijaya bam and Hari bam, and their officials were drawn from the Pátani, Punetha, Bhat, Upádhya, Joshi, Upreti, and Pánde subdivisions.

Kírati Chand, 1488-1503 A.D.

Ratan Chand died in 1488 A.D. and was succeeded by his son Kírati Chand, who bears as warlike a reputation as his father. He was constantly engaged in drilling and exercising his soldiers and preparing for some expedition or another. The Doti Raja again threw off his allegiance, and while Kírati Chand was calling in his men from the detached posts which the insecure state of his frontier obliged him to maintain, the Dautiyals invaded Kumaon in force. Connected with this invasion we have another of those episodes so characteristic of the people and the times and indeed of the traditions themselves that no apology need be made for giving it here, leaving the reader to judge the value which can be assigned to it. In some cases these stories cover actual facts; in others they give a poetical explanation of facts, and to attribute to the influence of a deity or a holy man success or defeat is a practice not unknown in Europe. The story informs us that while Kírati Chand was preparing to march against the Doti forces with the troops at his command, he heard of the arrival of a holy man by name Nágnáth and turned to him for counsel in the existing difficulty. Nágnáth said: "Your place is at Champáwat, send your general to the war.

Here is a whip with which he will scourge the Rainka as a man doth scourge a vicious horse." The advice was not palatable, for Kirati Chand was a brave prince and wished to lead his forces in person, but yielding to the urgent entreaties of his courtiers did as he was directed. The result was that the Doti army was almost annihilated and for a long time dared not appear again in force in Káli Kumaon. Nágnáth naturally acquired great influence and became the principal adviser of the Raja. He urged that now was a fortunate time to undertake still further operations and that if the Raja undertook an expedition towards Garhwál, he should meet the guru Satyanáth, who would instruct him as to what further he was to do.

Conquest of Bárahmandal and Pálí.

Some seventy years previous, when Udyán Chand was Raja of Champáwat, a prince of the Katyúri family called Bír Sinha Deva occupied the fort of Bisaud to the east of Bandani Devi near Almora and owned the country as far as the Suwál river, whilst on the other side of the river another Katyúri prince held and occupied the Khagmara fort on the Almora hill. In an inscription on a ruined temple near the Suwál and on the boundaries of the two governments we find the name Arjuna Deva and the date 1307 A.D., and on an old stone discovered on the Almora hill when making some repairs the name Niraya pála with the date 1348 A.D., names which doubtless belong to some of these Katyúri princes. We are told that Udyán Chand was at this time busy in repairing the temple of Báleswar and preparing it for the reception of the image. Srí Chand, a Brahman of the Gujráthi division, had settled with his son Sukhdeo in Champáwat, and the Raja asked the latter to conduct the installation service at the temple. Srí Chand was so annoyed at the preference shown to his son that he abandoned Champáwat and set out for Bárahmandal. On his way he visited the Bisaud Raja, who received him with much courtesy and accompanied him to the Suwál, regretting his inability to proceed further, as the country beyond belonged to another Raja. They separated and Srí Chand passed on by the gardens of the Khagmara Raja, where a gardener presented him with a *bijaura* or lemon to make sherbet with and refresh himself after his journey. Srí Chand refused the gift, giving as his reason that there was another lemon

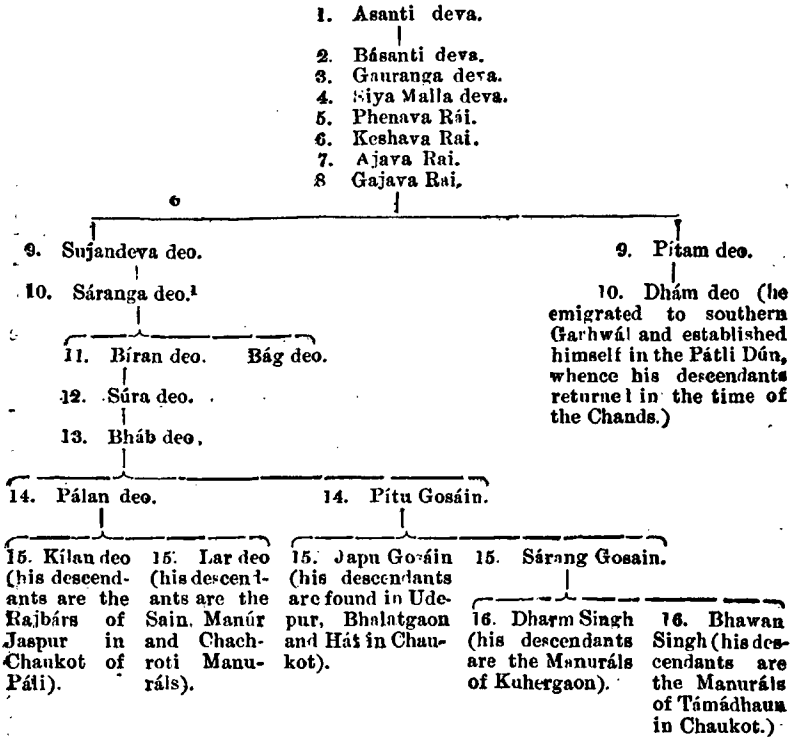
within the fruit. The lemon was cut in two and the Brahman's statement was found correct. The matter was reported to the Raja, who sent for Srí Chand and desired an explanation of the portent. The Brahman informed him that his kingdom should certainly pass away into other hands and that he should be prepared, for the day was not distant when the teaching of the omen should be fulfilled. In order to anticipate whatever evils might be in store for him the Raja gave over Khagmara to Srí Chand and fled to Syúnara. The Bisaud Raja then took possession of the country dependant on Khagmara, but lost his own lands on the left bank of the Suwál which were conquered by the Chands.

The relations between the Chands and Katyúris remained unchanged until Kírati Chand's time, who now resolved to seize upon the remainder of the Bisaud Raja's possessions. He entered Bárahmandal with a veteran army and laid siege to and captured Khagmara-kot and expelled the Raja. He next occupied Syúnara-kot and drove the Raja of that Patti to Borárau, where the Katyúri troops made a stand and by a night attack on the enemy's camp nearly exterminated the advanced guard of Kírati Chand's forces. Still the progress of the Chand Raja was little hindered; he eventually occupied the entire country lying between the Kosi and the Gagás and ordered the slaughter of all the inhabitants of the tract now known as Pattis Kairárau and Borárau. He then divided the land amongst his Káli Kumaon followers of the Kaira and Bora castes, who have given their name to the lands thus occupied to the present day. Páli was then attacked and the Katyúri Raja of Lakhanpur gave up his fort without resistance, simply stipulating for his people that no damage should be done to the country and that the Chands should regard the inhabitants as their own subjects. The Katyúris retired to Sult and built themselves a fort at Mánil, where they and other members of the conquered Katyúri families were for a long time allowed to live in peace.

Pedigree of Páli Katyúris.

The pedigree of these Páli Katyúris has been preserved and deserves a place here: when compared with that of the Askot and Doti families, the variations are unimportant:—

Pedigree of the Katyúris of Páli.


1. Asanti deva.
2. Básanti deva.
3. Gauranga deva.
4. Siya Malla deva.
5. Phenava Rái.
6. Keshava Rai.
7. Ajava Rai.
8 Gajava Rai.
9. Sujandeva deo.
9. Pítam deo.
10. Sáranga deo.[1]
10. Dhám deo (he emigrated to southern Garhwál and established himself in the Pátli Dún, whence his descendants returned in the time of the Chands.)
11. Bíran deo.
Bág deo.
12. Súra deo.
13. Bháb deo.
14. Pálan deo.
14. Pítu Gosáin.
15. Kílan deo (his descendants are the Rajbárs of Jaspur in Chaukot of Páli).
15. Lar deo (his descendants are the Sain, Manúr and Chachroti Manuráls).
15. Japu Gosáin (his descendants are found in Udepur, Bhalatgaon and Hát in Chaukot).
15. Sárang Gosain.
16. Dharm Singh (his descendants are the Manuráls of Kuhergaon).
16. Bhawan Singh (his descendants are the Manuráls of Támádhaun in Chaukot.)

In the pedigree there are none of the names of the Katyúri Rajas of the copper-plates and they probably contain only the names of the branch, and these only when they became of some importance. The two first names are clearly those alluded to in the memorial verse regarding Lakhanpur already noticed. The change of title in the case of Pítu from '*deva*' to '*gosáin*' is similar to that which took place in Askot and is doubtless due to the same cause.

Conquest of Phaldakot and Kota.

The conquest of Phaldakot was next undertaken and proved a more difficult task. It was at this time held by a Raja of the Káthi tribe of Rájputs, and though he perished in one of the first contests, his people held out in his name and defied the utmost endeavours of the Chand troops. Kírati Chand called for reinforcements and on

[1] An inscription on the temple of the Kuladevi or household goddess at Támádhaun in Chaukot records the name Sáranga deva and the date Saka 1342 = 1420 A.D., and may refer either to this Sáranga or to Sáranga Gosáin, whose descendants are still found in Támádhaun.

their arrival attacked the Káthis with redoubled vigour, ordering their total destruction. So well were his orders carried out that he was able in a short time to parcel out the lands amongst his Mára, Kharáyat and Dhek followers, on whom also he bestowed the fiscal offices of Kamín and Sayána. He next took possession of Kota and Kotauli and returned to Champáwat by Dhyánirau, consolidating his conquests by the appointment of administrative officers as he went. His next expedition was towards the Mal or low country, where he established a post near Jaspur and called it after his own name Kíratipur. He now held Kumaon as it exists at the present day with the exception of Katyúr, which was held by a Katyúra Raja, Dánpur, the Bhot Maháls Askot, Síra, Sor and the Mankoti *ráj* of Gangoli. The death of Satyanáth prevented his pushing his conquests into Garhwál, but taking all his acquisitions; Kírati Chand must be regarded as the most active and successful prince of his family. He died in 1503 A.D. and was succeeded by his son Partáp Chand.

Partáp Chand, 1503—1517 A.D.

Partáp Chand appears to have occupied himself with the work of administration and we hear of no new conquests made by him. We have a grant of his bearing date in 1510 A.D. and we also know that he succeeded in keeping possession of the parganahs bequeathed to him by his father. He died in 1517 A.D. and was succeeded by his son Tára Chand, who after an interval of sixteen years was followed by Mánik Chand in 1533 A.D.

Tára Chand, Mánik Chand.

Manik Chand reigned from 1533 to 1542 A.D., and during his time an event occurred which is not recorded in the local traditions. From the *Tárikh-i-Dáúdi* of Abdulla we learn that in the year 1541 A.D. Khawás Khán, the opponent of Islám Sháh, made the skirt of the Kumaon hills his home, whence he ravaged the royal territories which lay in their vicinity. He, however, joined the Niázís before the battle of Umbala and on the day of action deserted them on the plea of their wishing to exclude any man of the Sur family from the succession to the empire. His subsequent movements appear to have been extraordinary, for instead of joining Islam Shah, to whom he had communicated his intentions, he again returned to his haunts under the hills and finally sought the

Khawás Khán.

protection of the Raja of Kumaon. He entered Kumaon by the pass of Dabar and fixed his residence at Alhahí and received from the Raja some villages for his support as well as a daily allowance of cash. When intelligence of this reached Islám Sháh he directed Táj Khán Kiráni, who held the *súbah* of Sambhal and owed his preferment to Khawás Khán, to use every possible means to get the refugee into his power. "If his hand could not reach there, he was to do it by message, promising royal benefactions, such as the imperial districts at the foot of the hills, which could be made over to him. By holding out hopes such as these Táj Khán might be able to send him in chains to Court. Several messages were despatched at the same time to the Raja, who indignantly replied: "How can I throw into fetters a man who has sought my protection? As long as I have breath in my body, I can never be guilty of such baseness." Islám Sháh himself then wrote to Khawás Khán to say that he forgave him, and wished that what had passed should all be forgotten between them; that the Rana of Udepur had again raised his head and plundered several of the royal possessions and carried off the wives and children of Musalmáns; that none of the nobles had succeeded in their measures against him, and that all their hopes were now centered in Khawás Khán. "All this is asserted with all the sincerity that can attach to an oath before God, and after that, an engagement and guarantee was engrossed on saffron-cloth and despatched. And Táj Khán was at the same time instructed to use every kind of cajolery and flattery in order to lull that bird into security and entice him into the net; for the wounds which his conduct had implanted in the king's breast could not be healed but by the salve of his murder." On the receipt of these missives Khawás Khán's immediate impulse was to obey them, but he was strongly dissuaded by his adherents and the Raja, who represented that the king was perfidious, that he had destroyed most of his nobles, and how then could he allow Khawás Khán to escape, who had been ten times opposed to him in battle? These remonstrances, however, were of no avail, and notwithstanding the warnings of his friend, Khawás Khán gave himself up, when by orders of Islám Sháh he was beheaded and his body stuffed in straw was sent to Dehli.[1] The magnanimity shown by

[1] Dowson's Elliot, IV., 484, 350.

the Kumaon Raja is a bright spot in the annals of the Chands and is recognized even by the Musalmán historian. Mánik Chand was succeeded by his son Kalyán, nicknamed Kuli Kalyán on account of his ungovernable temper. He weakened his authority by a lavish use of his power of punishment and caused much discontent throughout the province. After a short reign of nine years he died and was succeeded by Puni or Puran Chand, who was followed by Bhíshma Chand.

Bhíshma or Bhikam Chand, who began to rule in 1555 A.D., had no son and therefore adopted a son of Tára Chand named Kalyán, who was nicknamed Bálo Kalyán Chand and is known by that name in all the traditions. Disturbances again arose in Doti and Bálo Kalyán was sent to quell them; but during his absence the old Raja was troubled by news of a rising in Páli and Syúnara and left himself to visit the west. Convinced that the growth of his dominions required a more central capital than Champáwat, the Raja looked about for a site and at last resolved to settle near the old fort of Khagmara and make it his new capital. He had hardly made known his intentions when a plot was set on foot to counteract them. Away on the southern face of the Gágar range near Ramgarh was an old fort held by a semi-independent chief of the Khasiyas, named Gajawa, who in some way had escaped the bands of Kírati Chand when his troops laid waste the pargana. Gajawa thought that the Khasiyas might now enjoy some revenge for all their sufferings as well as freedom in the future. He assembled a large number of his castemen and came unawares upon the old Raja as he tranquilly slept in the Khagmara fort and slew him and his followers. The triumph of the Khasiya chief however was very short lived, for no sooner did Bálo Kalyán Chand hear the news than he patched up a peace with the Dautiyals and hastening to Ramgarh and Khagmara took exemplary vengeance on all the Khasiyas in the neighbourhood. This event occurred in 1560 A.D.

Bhíshma, 1555—1560 A.D.

Bálo Kalyán Chand peacefully ascended the *gaddi* of the Chands. He accepted the choice of Bhíshma and made the Khagmara hill his capital under the name Almora. He separated the lands which had been given to Srí Chand by the last Katyúri Raja and taking the

Bálo Kalyán, 1560 A.D.

remainder for himself, built his own residence near the Nail-ke-pokhar in 1563 A.D. He then gave land to all the members of his household near his own residence and also to the Joshis who accompanied him. The Chautara Brahmans, however, remained in Káli Kumaon and ceased henceforward to fill the high offices that they had hitherto monopolised. Hardly had the darbár settled down in Almora that fresh occupation was found for the troops of the Raja. To the north-east of Almora, in the tract between the Sarju and eastern Rámganga, an independent kingdom had existed for several generations under Rajas of the Chandrabansi line who from the place of their residence were known as the Mankoti Rajas of Gangoli. Karm Chand, the first of this line who attained to any eminence, made himself obnoxious to his Upreti *kámdár* or minister, and in consequence was slain by the minister's followers when out hunting. The Upreti sent word to the Ráni of Karm Chand that the Raja had been killed by a tiger and that his general obsequies had been duly performed. The Ráni suspected that all was not right and calling for some Brahmans of the Pant tribe in whom she placed great confidence, intrusted to them her son to bring him up and protect him from his Upreti enemies. She then prepared herself to become a *sati* and when dying cursed the country, saying "since the Raja has been killed by a tiger, men shall ever be killed by tigers in Gangoli," and from that day until very recently Gangoli was the most noted haunt of tigers in Kumaon. The Pants fulfilled their trust and established Sítal Chand, the son of Karm Chand, on the *gaddi* at Mankot and received the lands of the Upretis as their reward. Sítal Chand was succeeded by Brahm Chand, Hingúl Chand, Puníp Chand, Ani Chand and Náráyan Chand. We have an inscription on an old well called the Jáhnavi Naula at Gangoli Hát bearing date 1264 A.D., which is attributed to the Gangola Rajas, in which the name Somati occurs, but the other names are not decypherable. In Baijnáth also there is an inscription of these Rajas in the ancient temple of Lakshmináráyan which records that in 1352 A.D. the Gangola Rajas, Hamíra deva, Lingarája deva, and Dhárala deu regilt the spire (*kalasa*) of the temple. A second record in the same place inscribed on the image of Gaurimahesvari in the Bhogmandir relates that in 1365 A.D. one Subhadra, wife of Kalhana Pandit, in the kingdom of Hamíra

deva, fulfilled a vow. Mention is also made in a petition in the case of Ratan Chaudhri of Gangoli (tried by Mr. Traill) of a grant by Ani Chand in 1311 Saka, corresponding to 1389 A.D., but as the original was never produced it may well be regarded as a forgery or at least that the petitioner was mistaken in the date, for Ani Chand was predecessor of Nárâyan Chand, the contemporary of Bálo Kalyán. Another Mankoti grant is alluded to in the file of the grants made to the Bageswar temple as bearing the date 1305 Saka or 1383 A.D., but the original is not forthcoming. It was Náráyan Chand who gave offence to Bálo Kalyán and induced him to invade Gangoli, which he quickly overran and annexed to his own possessions.

Acquisition of Sor.

Kalyán's great desire now was to make the Káli his eastern boundary, and whilst at Gangoli-Hát he looked with longing eyes on the fair country between him and that river which had been recovered by the Bam dynasty from Ratan Chand and was still in their possession. Kalyán had married a daughter of Hari Malla and sister of the reigning Rainka Raja of Doti and urged her to beg from her brother the pargana of Síra as dowry, as he hoped by this means to obtain a footing in the Doti territory. The entire tract to the east of the Ramganga[1] was then recognized as belonging to the Raja of Doti, and Kalyán Chand hoped thus gradually to approach the Káli. The Rainka replied that Síra was the chief possession (*sír*) of Doti and was therefore as dear to him as his own head; that he would never give up Síra, but that Kalyán might have Sor. The Kumaonis accordingly took possession of Sor, but were so unsuccessful in an attempt to lay hands upon Síra also that they returned in haste to Almora, leaving only a small garrison behind them. Kalyán Chand next turned his attention towards Dánpur on the upper waters of the Sarju, which had long been independent under its Khasiya Rajas, but had of late years been broken up into numerous petty districts. Practically the landholders in each village acknowledged no other authority than their own and thus fell an easy prey to the Chands. It may well be supposed that there were many cadets of the reigning family anxious to join in the plunder of the conquered tracts and carve out an appanage for

[1] Rámganga-par is still called Doti.

themselves. These junior members of the Chand house were called Ráotelas, and to them was generally intrusted the management of the frontier parganahs with considerable grants of land for their own support. In this way a landed gentry, as it were, connected by ties of blood and interest with the ruling power were gradually spread over the land and contributed more than any other measure to the strengthening of the Chand influence in the newly-acquired tracts. Bálo Kalyán ended his busy career in 1565 A.D. and was succeeded by his son Rudra Chand.

Rudra Chand, 1565–1597 A.D.

Rudra Chand was very young when he succeeded his father and was much under the influence of the women of his father's female apartments and the priests who were attached to the court. One of the earliest acts of his long reign was the re-establishment of the worship of Mahádeo at Báleswar in Káli Kumaon in this wise. A Sanyási named Rámadatta told the young Raja that his kingdom was buried in the ground with Mahádeo near the temple of Báleswar. The Raja paid a visit to the temple and dug where he was desired by the Sanyási and discovered a great ling of stone which was set up in the temple and endowed with a *náli* of grain from each village at each harvest. Rámadatta was appointed guardian of the temple and built his mausoleum (*samádh*) near it.[1] Shortly after the accession of Rudra Chand, the Tarái and Bhábar were occupied by the Musalmán governor of Kánt-o-golah (Sháhjahánpur), who was probably Husain Khán Tukríyah. From Firishta we learn that at this time an impression of the great wealth of Kumaon was generally prevalent amongst the Musalmáns. At the conclusion of his work in speaking of the princes of India he writes:—"Of these princes there are five principal Rajas on the north and five others on the south, each of whom has numerous tributary Rajas dependent on him. * * The five former Rajas are the Rajas of Kooch, Jammu, Nagrakot, Kumaon and Bhimbar." Again he writes:—"The Raja of Kumaon also possesses an extensive dominion, and a considerable quantity of gold is procured by washing the earth

[1] This verse commemorating Rudra's gift is still well-known :—

"*Jau Rudra Chand ke áli tau Rámadatta ke náli.*"

The descendants of Rámadatta still reside in the monastery (*math*) at Gananáth.

mounds in his country, which also contains copper mines. His territory stretches to the north as far as Tibet and on the south reaches to Sambhal, which is included in India. He retains in pay an army of 80,000 men both in cavalry and infantry and commands great respect from the emperors of Dehli. His treasures too are vast. It is a rule among the kings of Kumaon not to encroach on the hoards of their ancestors, for it is a saying amongst them that whoever applies his father's treasures to his own use will become mean and beggarly in spirit;[1] so that at the present day fifty-six distinct treasures exist which have been left by the Rajas of Kumaon, each of which has the owner's seal upon it. The sources of the Jamna and the Ganges are both to be found within the Kumaon territory." This description[2] of Firishta would appear to be more correct of Garhwál than of Kumaon, for the former country has been celebrated from the earliest times for its mines of copper and lead and the gold-washings in the Alaknanda and Bhágirathí valleys and along the Sona Nadi in the Pátli Dún. It also contains the sources of the two rivers. The number of princes would also lead us to imagine that Garhwál was intended, and if we assume that Firishta completed his history by 1623 A.D., for which we have the authority of Mohl,[3] the Raja ruling in Garhwál at the time will be Garbhabhanjan Mahípati Sáh, its first really independent prince and who is fifty-fourth on the list of Rajas already given. From this we may suppose that Firishta had a similar list before him when writing the conclusion to his great work.

Husain Khán Tukríyah.

Husain Khán Kashmíri, the Bayard of Akbar's court, but at the same time a bigoted, cruel and merciless fanatic, received the name Tukríyah on account of his tyranny towards the Hindús. He was once governor of Lahore and meeting a man with a flowing beard, saluted him, believing that he was a Musalmán. On discovering that the man was a Hindu, he issued an order that in future all Hindus should wear a distinguishing mark on their shoulders, which being called in Hindi '*tukri*' obtained for him the nickname of 'Tukríyah.' He was governor of Lucknow in 1569 A.D., and being

[1] There is little doubt that Firishta here refers to the precatory verses usually attached to a grant of land by a Hindu Raja and to which he has given a wider significance than they possess: see *antea* p. . [2] Brigg's Firishta, IV., 547, 549. [3] Dowson's Elliot, VI., 209.

deprived of his charge resolved to lead a crescentade against the hills, from which he expected much spiritual profit from slaying infidels and disfiguring their idols and much temporal benefit from the plunder of the famous treasury of the Rajas of Kumaon. He accordingly set forth from Lucknow with (according to Badauni)[1] "the design of breaking down the idols and of demolishing the idol temples. For he had heard that their bricks were made of gold and silver and other false reports of their unbounded treasures had come to his ears. He proceeded through Oudh towards the Siwálik hills. The hill-men as is their custom abandoned the lower hills after a slight resistance and fled for security to a higher elevation, of which the ascent was very dangerous. Husain Khán arrived at last at the place where Sultán Mahmúd, nephew of Pír Muhammad Khán, was slain. He read the *Fátiha* for the pure spirits of the martyrs who fell there and repaired their dilapidated tombs. He then ravaged the whole country as far as the kasbah of Wajráil in the country of Raja Ranka, a powerful zamíndár, and from that town to Ajmer, which is his capital. In that place are to be found mines of gold and silver, silks, musks and all the productions of Tibet, from which country he was only distant two days' journey; when on a sudden, as has been frequently observed in those mountains, the neighing of the horses and the sound of the kettle-drums, as well as the voices of his followers, caused the clouds to collect and so much rain fell that neither corn nor grass was to be procured. Famine stared the army in the face, and although Husain Khán with the most undaunted intrepidity encouraged his men and existed their cupidity by representing the wealth of the city and the country in gold, jewels and treasure, they were too much disheartened to second his resolution and he was compelled to retreat. On their retreat the Káfirs who were in possession of the passes showered down stones and arrows tipped with poisoned bones upon them. They also blocked up the way and most of the bravest of his warriors drank the cup of martyrdom. Many of the wounded who escaped at the time died five or six months afterwards from the effects of the poison. Thus ended the first expedition of Husain Khán. The title Rainka Raja is that of the Raja of Doti at this time, and we may identify the name

[1] Dowson's Elliot, V., 468 496 : Blochmann's Aín-i-Akbari, 373.

Wajráil with either Júráil or Dipáil, the cold-weather residence of the Doti Raja on the Seti river at the foot of the hills. His principal fort was Ajmergarh near Dandoldhúra, where the Chauntara or governor now resides. The insalubrity of the Doti Tarái is notorious even to the present day, and the allusion to Husain Khán's being within two days' journey of Tibet is doubtless referrible to the mart of Barmdeo, which was then as now the great emporium for Tibetan produce. To the west in Garhwál there is a patti called Ajmer which is now confined to the lower hills between the Málini and Khoh rivers, but at one time included the whole of parganah Ganga Salán, but this tract was at this time in the possession of the Sáh rulers of Garhwál.

On his return from this expedition Husain Khan asked for and received Kánt-o-Golah in *jágír* in lieu of one previously held by him. "Several times he made excursions to the foot of the hills with various success, but he was never able to penetrate into the interior. Many fine fellows who had escaped half-dead from his first expedition now felt the malarious influence of the climate and died off, but not in battle. After some years Husain Khán, contrary to the advice and remonstrances of his friends, mustered his forces for a final struggle to get possession of the hills." This was in 1575 A.D., and all his efforts were now devoted to gain possession of Basantpur, a town of considerable importance and reputed wealth in the Eastern Dún. This expedition was solely actuated by his religious zeal and a love of plunder, and after breaking the idols, defiling the temples and laying waste the country, Husain Khán returned to his estate with much plunder and, moreover, a bullet in his side. Akbar had already received many complaints of the exacting behaviour of Husain Khán towards the Hindús, and on being informed of this unprovoked attack on a friendly town, recalled the Gházi to Dehli, where he died shortly afterwards of his wounds. There is nothing to show that Husain Khán ever penetrated into Kumaon, though he held the Kumaon Tarái which lay not far to the north of his *jágír*. Sultán Ibráhím of Anba, another of Akbar's grandees, is credited with the conquest of Kumaon and the Dáman-i-koh, as the tract lying along the foot of the hills is called by the Musalmán historians.

Visit to the Emperor.

The hill tradition is that shortly after the death of Husain Khán, when Rudra Chand had arrived at years of discretion, he assembled a force which he led in person into the Tarái and expelled the Musalmán officials. Complaints were sent to Dehli and a strong reinforcement was sent to aid the governor of Katehir. Rightly believing that he could not withstand the enemy in the open field, Rudra Chand proposed that the claim to the Tarái should be decided by a single combat between the champions of the respective forces. After some preliminary negotiation this form of the trial by ordeal was agreed to. Rudra Chand fought on the part of the Hindús and a Mughal officer on the part of the Musalmáns and after a long and severe contest the Hindú champion was declared victor. This little piece of boasting is pardonable in the local traditions when we have the acknowledgment that the Mughals were never able to enter the hills. It is further recorded that Akbar was so pleased with the conduct of the Kumaon prince that he invited Rudra Chand to Lahore, where he then was, and sent him and his followers to aid in the seige of Nagor, where the hill-troops so distinguished themselves that, on their return, Akbar conferred on their leader a formal grant of the *Chaurási-Mal* parganahs and further excused Rudra Chand from personal attendance at court during the remainder of his life. Rudra Chand, moreover, made Bírbal, the celebrated minister of Akbar, his purohit, and up to the close of the Chand rule, the descendants of Bírbal used to visit Almora to collect the customary dues. This visit of Rudra Chand is not so highly spoken of by the Musalmán historians. Abdul Kádir Budáúni relates[1] that "in 1588 A.D. the Raja of Kumaon arrived at Lahore from the Siwálik hills for the purpose of paying his respects. Neither he nor his ancestors (the curse of God on them!) could ever have expected to speak face to face with an emperor. He brought several rare presents and amongst them a Tibet cow (yak) and a musk-deer (*Moschus moschiferus*), which latter died on the road from the effect of the heat. I saw it with my own eyes and it had the appearance of a fox. Two small tusks projected from its mouth and instead of horns it had a slight elevation or bump. As the hind-quarters of

[1] Elliot, V., 541. *Ibid.*, VI., 332.

the animal were enveloped in a cloth I could not examine the whole body. They said that there were men in those hills who had feathers and wings and could fly, and they spoke of a mango tree in that country which yields fruit all the year round." Well did the author add to this account :—"God knows whether it is true!" Jahángír in his memoirs expressly states that the father of Lakshmi Chand, "at the time of waiting upon the late king, sent a petition asking that the son of Raja Todar Mal might lead him to the royal presence, and his request was complied with," so we must abandon the local tradition of the combat and its consequences.

Tarái and Bhábar.

The tract lying along the foot of the hills, has, as we have seen, been gradually growing in importance with the Kumaon rulers. From the Musalmán historians and the traditions of the plains' tribes we gather that in the eleventh century this tract was covered with dense forests interspersed with patches of grazing and cultivation.[1] The people were chiefly occupied in pasturing cattle, the scant cultivation being barely sufficient for their wants. Rude temporary dwelling-places were the rule, but here and there were forts to which the graziers could fly in times of danger. It was not till a hundred years later that the Kshatriya clans entered Katehir and gave it their name. These in turn harassed by the Musalmáns crossed the Rámganga into the forest country and brought much of it under the plough. In the thirteenth century these tribes suffered cruelly at the hands of Nasír-ud-din Mahmúd and Ghiyás-ud-din Balban. Again, Fíroz Sháh, in revenge for the murder of his Sayyid friends, sent an army into Katehir every year "to commit every kind of ravage and devastation and not to allow it to be inhabited until the murderer (who had taken refuge amidst the ravines and precipices of Kumaon) was given up. For six years not an inhabitant was allowed to live in the plains country bordering on the Rámganga and not a single acre of land was cultivated. This state of affairs lasted until 1385 A.D., and at that time the frontier outpost of the Musalmáns was a stronghold in Bisauli about fourteen *kos* from Budaun, called in mockery by the people the fort of Akhirínpur. The Tarái belt was wilder still and

[1] See further Gaz., V., Bareilly District, *History*.

was even then occupied by the Mahtas or Mewátis, whom we find there at the conquest by the British. Although early in the fifteenth century Garur Gyán Chand and his son Udyán Chand are said to have claimed an ancient right over this territory, it is clear from all that has been recorded regarding them that this assertion had the faintest possible foundation in fact.

The inhabitants of the lower Pattis, from the earliest times, undoubtedly had recourse to the Bhábar, as at present, for grazing purposes, but these very Pattis did not come into the possession of the Chands until the conquests of Ratan Chand and Kírati Chand and the transfer of the seat of government to Almora in the middle of the sixteenth century. The southern protion of the lowland tract or the Tarái proper was first permanently taken possession of and annexed to the hill state by Rudra Chand, who was also the first to take measures to ensure the obedience of the nomad and semi-barbarous inhabitants to the central authority.

Kumaon in the *Aín-i-Akbari*.

In the *Aín-i-Akbari* we find the following distribution of the territory comprised in Akbar's Sarkár Kumaon. The entire Sarkár contained twenty-one mahál assessed at 4,04,37,700 *dáms*, which, taken at the rate of twenty double *dáms* for the rupee, are equivalent to Rs. 20,21,885. Five mahál yielded no revenue and the entire Sarkár was supposed to furnish a quota of 3,000 cavalry and 50,000 infantry :—

Name of mahál.	Revenue in *dáms*.	Name of mahál.	Revenue in *dáms*.	Name of mahál.	Revenue in *dáms*.
	Rs				
1. Aodan ...	4,00,000	8. Bhúri ...	*Nil.*	16. Gazarpur...	*Nil.*
2. Bhúkasi } ...	4,00,000	9. Ratílá ...	10,25,000	17. Dwárakot...	*Nil.*
3. Bhákasá }		10. Chattki...	4,00,000	18. Malwárah...	25,00,000
4. Bastarah ...	2,00,000	11. Jakrám ...	5,00,000	19. Malachor... }	50,37,700
5. Panchotar ...	4,00,000	12. Jardah ...	3,00,000	20. Sítachor ... }	
6. Bhakaindewar.	2,00,000	13. Jáon ...	25,000	21. Kamús ... }	
7. Bhakti ...	11,00,000	14 Choli ...	*Nil.*		
		15. Sahajgar,	*Nil.*		

It is very difficult indeed to trace these names to existing appellations. Aodan would appear to represent the Tarái of Kheri: Bhúkasi to represent Bhuksár now known as Rudrpur and Kilpuri: Sahajgar is the old name of Jaspur; Gazarpur is the same as Gadarpur; Malwárah is the Mal or Tarai country; Sítachor,

Malachor and Kamús parts of the Bhábar; Bhakti may probably be Bakshi, the old name of Nánakmatha, and the others, names of parts of the country below the hills as Dwárakot is Thákurdwára. The entire enumeration is apparently confined to the tract along the foot of the hills, for not a single name can be identified with any tract within the hills. This exemption of the hill parganahs from Akbar's statements is supported by the following story which, upon the authority of the 'Raja's historians,' General Hardwicke gives regarding the position of the Garhwál Raja in the time of Akbar: "In the reign of Akbar that prince demanded of the Raja of Srinagar an account of the revenues of his *ráj* and a chart of his country. The Raja, being then at court, repaired to the presence the following day, and in obedience to the commands of the King presented a true statement of his finances, and for the chart of his country humorously introduced a lean camel, saying, 'this is a faithful picture of the territory I possess; up and down (*úncha nícha*), and very poor.' The King smiled at the ingenuity of the thought, and told him that from the revenues of a country realized with so much labor and in amount so small he had nothing to demand."

Tarái.

The portion of the Tarái that came into the possession of Rudra Chand was called the chaurási or Naulakhiya Mál. The former name was given because it was supposed to be 84 kos in length and the latter name from the revenue of nine lakhs said to have been assessed upon it. It was bounded on the east by the Sárda river, on the west by the Píla Nadi, on the north by the Bhábar, and on the south by certain well-known limits separating it from the plains parganahs, and contained the following fiscal sub-divisions:—

1. Sahajgír, now known as Jaspur.
2. Kota „ „ Káshipur.
3. Mundiya „ „ Bázpur.
4. Gadarpur „ „ Gadarpur.
5. Bhuksár, now known as Rudrpur and Kilpuri.
6. Bakshi, now known as Nánakmatha.
7. Chhinki „ „ Sarbna.

Rudra Chand himself founded Rudrapur and established governors throughout the different parganahs. It was one of these, Káshináth Adhikári by name, that founded Káshipur, which now gives its name to a tract that was formerly included in the old parganah of Kota. On his return to Almora, Rudra Chand built the

fort which is now used for the public offices, also a residence for himself on the site of the old fort temples to Devi and Bhairava, on the place where his father's palace stood. Rudra Chand was an intelligent and learned prince and during his reign he so encouraged the study of Sanskrit that his pandits were said to have rivalled those of Benares and Kashmír. He initiated many important measures regarding the settlement of the land-revenue, and in this he was ably aided by his blind son Sakti Singh Gosháin. His principal officers were members of the Sílakhola Joshi family, Ratgalli and Adhikári Bishts and Sáhus from Dwára Hát, who were hereditary record-keepers. There are now no descendants of the old Ratgallis and Sáhus in Almora, where their place has been taken chiefly by the Chaudhris from Jwálamukhi. The salaries of the officials were discharged by orders on the royal villages and not by regular money payments. Some of these orders were due to circumstances entirely unconnected with the administration. Thus it is said that when Rudra Chand returned from Dehli he used the utmost speed to regain Almora and was riding in the dark along one of the mountain paths when his bridle broke. The groom in the dark picked up a snake and with it mended the bridle, and when daylight broke the Rája saw what had happened and cheered by the omen ordered that the groom (*bukhuriya*) should receive certain dues (*dastúr*) from all the villages in the country at the two harvests. We have a grant of land of this Raja in favor of the family of Debidatta Chaudhri, dated in 1565 A.D., and another in favour of the Briddh Kedár temple[1] in 1568 A D. Also one in favour of Anand Pánde in 1575 A D. and in favour of the Pándes of Chámi in 1594 A.D. In 1596 A.D. he assigned lands to the family of Krishnanand Joshi and in the same year gave a village to the Badrináth temple, so that there are ample records whereby to fix the date and length of his reign.

Attempt on Síra.

The mother of Rudra Chand was the Doti princess who asked for Síra from her brother and was refused. Dissatisfied with the refusal she resolved not to become a *sati* on the death of her husband, saying:—"My work is not finished; when my son takes Síragarh, then will I join my lord." Ever since his return from the plains Rudra Chand

[1] At the confluence of the Rámganga and Bino rivers.

was urged by his mother to take up arms against Síra. She told him that it was his father's last command that Síra should be united to Kumaon and that she longed to join her husband, but could not do so until his desire had been accomplished. Rudra Chand proceeded to Síra, but was utterly defeated by the Rainka Raja Hari Malla and fled with the remains of his army to Gangoli. Fatigued by the rapidity of his flight and deserted by most of his retainers, the Rája lay down to rest beneath a tree, and looking upwards saw a spider spinning its web and trying to unite one point with another. Six times the spider failed, but the seventh time it succeeded and completing its web began to eat the flies that were caught in it. The Raja, like the great Bruce, reflected that if an insect could thus by perseverance attain its object, surely a man of tried courage and fixity of purpose like himself ought to succeed. He returned to Almora and summoning his courtiers related what had occurred. They unanimously accepted the dream as a good omen and advised him to discover first the strength of the enemy and then the character of the defences of their stronghold of Síragarh. At that time there was a Bichrál Brahman in Síra whose sister's son, Purushottama or Parkhu Pant, was in Gangoli and was known everywhere as a man of influence and great resource and in possession of much of the treasure that once belonged to the Mankoti Raja. Rudra Chand sent for Parkhu, who excused himself on various pretences, so that the Raja again sent a message fining him a lakh of rupees for his disobedience and threatening him with condign punishment should he make any further delay. Parkhu came and with clasped hands made the great obeisance and said: "I have no money; I am a poor man; dispose of my life if you desire, and if this is not your object I will ransom it by procuring for you the forts of Síragarh and Bádhangarh and the countries belonging thereto." Parkhu's proposal was accepted and he was placed in command of an army which again invaded Síra.

The forces of Rudra Chand made three attempts to reach the fort of Síra and were each time repulsed with great loss, and Hari Malla followed up his success by pursuing the fugitives right across the eastern Rámganga. The leaders were separated and Parkhu like Rudra Chand, on a former occasion, paused in his flight to take refuge

Parkha Pant.

under a tree and there saw a dung-beetle trying to move a large mass of cow-dung to its hole. Four times the ball rolled down, but the fifth time the insect was successful. A similar consoling reflection occurred to Parkhu, and he at once called for food, which was brought him in the shape of rice boiled in milk (*khíra*), which was served on a plantain leaf. He lost much of the rice while eating, and an old woman who was looking on said: "You are as great a fool as Parkhu; he cannot take Síra and you cannot eat *khíra;* begin from the edge and work into the middle of the platter and you will lose no rice, and if Parkhu began from the outside and stopped the supplies from Juhár and the underground way to the river, the garrison of Síra would soon yield." Parkhu without betraying his identity departed and again assembling his forces invested the fort and following the advice of the old woman cut off the supplies from the Juhár and the adit or *súrang* at Chunpátha by which the garrison obtained water, so that in a short time Hari Malla abandoned the fort and fled to Doti and henceforth Síra belonged to Kumaon. Rudra Chand bestowed several villages on Parkhu and recorded his gift on a copper-plate now in the possession of a descendant of Parkhu residing in Gangoli. It relates how that "in the year 1581 A.D. in the month of Bhadra and ninth day of the bright fortnight in the presence of Jagísa,[1] on a Saturday." Then follow the verses:—

"1. Whose manly valour parched the partizans of his enemies, by the conquest of whose cities he acquired reputation. Renowed as Sákara worshipper of the goddess of the full moon in the family of the lord of the lotus, he became the gem of the rulers of earth, being called Kalyána Chandra.

2. Every stroke of his dreadful sword held in his strong arm severed the skulls of elated monarchs, which caused their mourning widows to shed showers of big pearls on their bosoms.

3. Whose white lotus feet were colourless and received the impressions of people's hearts in them, in consequence of which the needy grew rich by begging elsewhere also?

4. His son, the defeater of the races of his adversaries, is the famous Rudra Chandra, who is devoted to the feet of Rudra, and the source of victory in the conquest of fort Síra. It is this possessor of the earth by whom the grant of this land is made.

5. To the conqueror of lands for the royal estate, the ablest and most excellent of counsellors, queller of the haughtiness of the Raja of Doti, the lion overpowering the enemy, the most learned of scholars, Purushottama."

[1] Jageswar near Almora.

Rajas of Síra.

From another source we have the following pedigree of the Rainka Rajas of Síra, who were sometimes apparently one with the Rainka Rajas of Doti and sometimes cadets of the same house :—

Pedigree of the Rainka Rajas of Sira.

1. Adhi Ráwat.
2. Bhíshma Ráwat.
3. Bhakti Ráwat.
4. Dhíra Malla.
5. Jagati Malla.
6. Kuru Pála.
7. Rípu Malla.
8. Bhupati Malla.
9. Bhárati Malla.
10. Dáta Malla.
11. Ananda Malla
12. Ráj Malla.
13. Kalyán Malla.
14. Jurbán Malla
15. Arjuna Malla.
16. Nága Malla.
17. Bali Náráyan Malla.
18. Dungara Basera.
19. Madan Singh Basera.
20. Rái Singh Basera.
21. Sobha Malla.
22. Hari Malla, who lost Síra.

Bali Náráyana Malla was expelled by a Khasiya chief whose family ruled for three generations. The descendants of Hari Malla are said to be still found in one of the villages in the east of Doti. With Síra the remainder of the *cis*-Káli possessions of the Raja of Doti fell into the hands of Rudra Chand, who, doubting the loyalty of the inhabitants, expelled all the families of note that were bound by interest to the Doti Raja and distributed the lands of Síra amongst his Ráotelas and their followers. The Ráni of Kalyán Chand was satisfied with the result of her son's victories and taking her husband's weapons in her arms cheerfully ascended the funeral pyre and became a *sati*. Rudra Chand took possession of Askot, Dárma and Juhár, but allowed the Rajbár of Askot to retain his patrimony as zamíndár, and to the present day this is the only estate in Kumaon held in pure zamíndári and to which the rule of descent through the eldest son is attached. Kuru Gosáin, a junior member of the Askot family, was from his local knowledge appointed to settle the revenues of Dárma and Juhár, whilst Byáns and Chaudáns still remained with Jumla.

Attempt on Badhángarh and conquest of Katyúr.

Rudra Chand now called on Parkhu to carry out his promise to capture Badhángarh in the valley of the Pindar, a part of the territory of the Raja of Garhwál. The route to the Pindar lay through Someswar and the Katyúr valley, which was then held by Sukhal Deo, the last reigning Raja of the ancient family. Dularám Sáh was Raja of Garhwál and promised his protection if Sukhal Deo would aid him, and sending a force towards Gwáldam

and one towards Ganai, occupied the passes towards Badhángarh. Parkhu with his small but veteran army proceeded through Katyúr to the valley of the Pindar, but soon found his supplies cut off by the Katyúri Raja and shortly afterwards lost his life in an action near Gwáldam at the hands of a Padyár Rajpút. The Garhwál Raja had promised a grant of land at every day's march to any one who would bring him the head of Parkhu, and the Padyár accordingly took the head of the slain general and carried it to the Raja of Garhwál, at Srinagar, where he received the promised reward. The Kumaonis fled to Almora and Rudra Chand in person then undertook the preparations for a new expedition against Garhwál, but first resolved to punish the Raja of Katyúr. He speedily overran the valley and captured the Raja with all his family, for the Garhwális were forgetful of their promise to send assistance. When Rudra Chand was about to issue orders for the punishment of the Katyúri Raja, one Ratu, a Burha or headman of a village, came forward and remonstrated with him that there was neither honour nor profit to be gained from throwing the Katyúris into prison, that he was willing to stand security for the good behaviour of Sukhal Deo and would produce him at the end of six months, to be dealt with in such way as the Rája might direct. This Ratu, though a subject of Rudra Chand, was a secret friend of Sukhal Deo, and on obtaining the Raja's consent took Sukhal Deo to his own country and refused to deliver him up when called upon to do so. Rudra Chand therefore again invaded the valley and in a battle fought near Baijnáth slew Sukhal Deo and banished his family and then laid waste the entire valley.[1]

[1] A long story is told about this matter of Ratu which may well be relegated to a foot-note. Tradition says that Ratu promised Rudra Chand that if he should be accepted as surety, he would guarantee that Sukhal Deo should make no further pretensions to Katyúr, or in default he (Ratu) would pay a fine of 19,000 takas (two=one pice) or bring in 243 prisoners from Katyúr. At the expiry of the six months Rudra Chand demanded the production of Sukhal Deo, and Ratu went to the Katyúri prince and showed him the order, at the same time advising the Raja to dismiss him with shame and insult. Sukhal Deo did so and Ratu came and represented the matter to Rudra Chand, who only ordered him to fulfil his contract. Ratu threatened that if the Chand Raja persisted he would sit in *dharna* on him and took away his daughter ostensibly to kill her before the Raja or a temple and thus fasten the sin on him. On the way to the great temple of Baijnáth he concealed his daughter and made up a dummy, which he brought to the temple and sprinkling it with the blood of a recently killed goat, pretended that it was his daughter, and burying it before the door of the temple invoked the wrath of the gods against Budra Chand who had caused him to commit this cruel act. The Raja, however, saw through the fraud and invading Katyúr, slew both Ratu and Sukhal Deo.

Rudra Chand died in 1597 A.D. and was succeeded by his son Lakshmi or Lachhmi Chand. The elder son Sakti Gosáin was blind, but still took no mean part in the administration. He was a holy man of great energy and religious feeling and made many pilgrimages to various temples and continually mortified himself by prayer and fasting, so that the gods, in their mercy, might restore him to sight. It is said that through the favour of the great goddess of Jwálamukhi he received in lieu of sight such intense powers of touch and hearing as well made up for the loss of one sense. At all events to him is attributed the carrying out of his father's views in the elaboration of a complete settlement record of the land, the establishment of the *bísi* as the standard of measure, the mapping out of the entire cultivation, and the regular arrangement of the Raja's household and civil and military establishment on a stable footing. He distributed the officers into three classes, the *sardárs*, *faujádrs* and *negís*. To the first class was intrusted the management of important districts and posts, whilst the second class held command of levies, and the third class (from *neg=dastúr* or due) formed the subordinate officers of the army as well as of the civil administration. Instead of obliging each village to supply a portion of the expenses of the royal table and the salaries of the royal servants, he set apart specified villages for the support of particular departments of the Raja's service, known as *bútkara* villages, and also planted gardens in various places to supply the royal table with fruit. The Lachhmína and Kapína gardens near Almora were of this class and were cultivated by predial slaves of the Dom caste known as Bariya. A line of villages stretching from the snows to Almora was set apart for supplying the royal table with snow under the name Hiunpál. The long-continued wars had given rise to a body of professional soldiers who sought as their reward grants of land in the conquered districts; these were now for the first time administered on a fixed system and regular assignments of land were made for the support of troops in camp and garrison under the name of *bísi bandúk*. So minute was the supervision that it is said the practice of growing grain and fruit on the tops of the houses dates from the settlement of Sakti Gosáin, because these were

Lakshmi Chand, 1597-1621 A.D.

the only places left by him untaxed. There is no doubt but that regularity either in the fiscal arrangements or in the general administration would be distasteful to men who for centuries had enjoyed the utmost license, and it may have been impolitic to impose heavy burdens on a newly-conquered people; but taken as a whole the measures introduced in this reign were highly beneficial to the people as well as to the treasury of the Raja and enabled succeeding rulers to advance still further in the path of progress.

Invasion of Garhwál.

Lakshmi Chand, the titular ruler of Kumaon, was less successful in his portion of the administration. Desirous of carrying out his father's policy, he seven times invaded Garhwál, but was each time repulsed with considerable loss, and to this day the Garhwális point out with pride the ruins of the petty fort called Siyál Búnga (jackal's fort) which withstood the might of the great Chand Raja of Kumaon. Lakshmi Chand was so hard pressed in his last expedition that he was obliged to conceal himself in a litter (*doka*) under a heap of soiled clothes, and in this ignominious manner made his entry into his capital. While his bearers rested on the way, he overheard one of them say to the other that the cause of the Raja's defeat was his lax observance of his religious duties. The conscience-stricken Raja immediately applied to his spiritual adviser for assistance and told him that the *mantra* or spell received from him had been of no avail in his wars and threatened further to become a religious mendicant and give up worldly affairs for the future. The guru, frightened at the possible loss of his position, besought the Raja to wait for one year, whilst he sought diligently throughout the whole country for spells of might and consulted the pandits of Nadiya in Bengal. The guru returned in time with a new *mantra*, and thus armed the Raja resolved again to try the chance of war. To render assurance doubly sure he built the Lachhmeswar temples at Bágeswar and Almora and made grants to the other great temples, and we have his original grant of a village to Jageswar bearing date in the year 1602 A.D., and one bearing date in the following year confirms no less than eight grants made by him in favor of the Bágeswar temple, which he also completely restored.[1] He

[1] We have also a grant bearing date 1605 A.D. in favour of the family of Debidatta Chaudhri, friends of the minister Básdeo Pant, and one bearing date in 1616 A.D. in favor of the family of Mahádeo Joshi.

frequently encamped at the confluence of the Gomati and the Sarju near Bágeswar during his expeditions to Garhwál, and it was there that he paid his devotions to the gods before commencing his eighth expedition. In this, his last attempt, he was more successful in that he was able to plunder the frontier parganas of Garhwál and retire in safety to Almora, but he made no permanent impression on the country, and his only other work was to settle the boundaries of Dárma and its trade with Tibet. Lakshmi Chand, like his father, desired to visit the imperial court, and Jahángrí in his memoirs[1] records that Lakshmi Chand begged him to order the son of Itimád-ud-daulah to conduct him to court, and to meet his wishes Sháhpur was sent to bring him into the presence. "The hill-prince brought a great number of the valuable rarities of his mountains for my acceptance. Amongst them were beautiful strong ponies called *gúnths*, several hawks and falcons, numerous pods of musk and whole skins of the musk-deer with the musk in them. He also presented me with various swords which were called *khandah* and *kattára*. This Raja is the richest hill-chief, and it is said there is a gold mine in his territory." Lakshmi Chand died in 1621 A.D. and was succeeded by his son Dhalíp Chand.

Dhalíp Chand, 1621-24 A.D.

Dhalíp Chand reigned for three years and might be passed over without notice were it not that his name is connected with a story which quaintly illustrates the Indian belief in metempsychosis. It will be remembered that in the time of the Mankoti Rajas of Gangoli a quarrel arose between the Upretis and the Pants, and that the latter expelled the Upretis and succeeded to the chief administration of the State. One of the Upretis determined to have revenge on the enemies of his family, and for this purpose prayed to the gods that he might be born again as a Raja of Kumaon. He visited all the great places of pilgrimage from Jwálamukhí to Dwáraka, from Dwáraka to Ceylon, and thence round by Jagannáth and Benares to Prayág (Allahabad). Here at the confluence of the sacred rivers was the celebrated fig-tree. Whoever committed

[1] Dowson's Elliot, VI., 322. The rarities noted are chiefly from the Bhotiya parganahs. The *katár* was a short dagger, the form of which was copied in their sign-manual by the Chand Rajas. The word '*khandah*' should probably be '*khanjar*,' the name of another similar form of dagger. It is said that the imperial troops visited the lowlands in this reign, and their places of encampment are pointed out at Tánda and Pípalháta, near which is a grove called the Bádsháhi Bágh.

suicide by throwing himself from that tree into the holy waters was certain to attain his desires. The Upreti performed '*karot*,' as this form of committing suicide is called in the hills, and was born again as Dhalíp Chand. His enmity towards the Pants first showed itself by his seizing one Jait Rám Pant of Gangoli, who had committed no offence. The man, however, was condemned, executed and burned in the Raja's presence, but the smoke of the funeral pyre so filled the Raja's palace that he fell sick and died in seven days. It must be remembered that this version of the story of Dhalíp Chand and the Upreti has been communicated by a descendant of these very Pants who were always, and I suppose always will be, distinguished by their talent for intrigue. It was this spirit of intrigue that led the Pant party in Gangoli to so disturb the peace of the country in their efforts to destroy the Upretis that the Raja was obliged to interfere. He had already dismissed Basdeo Pant, who had been his father's minister, and proclaimed that whichever party be found marauding in future should be severely punished, be he Pant or Upreti, and it so happened that Jait Ram Pánde, a Pant leader, was taken red-handed whilst plundering his enemy's village and was executed by orders of the Raja. In revenge for this bold assertion of the right of the head of the State, the Pants have ever afterwards handed down the Raja as a kind of demon possessed by the evil spirit of one of the heriditary enemies of their tribe, the Upretis. The Raja died in 1624 A.D., and of his twenty-one sons Bijaya Chand succeeded him.

Bijaya Chand, 1625 A.D.

Bijaya Chand was young when he succeeded to the throne, and the entire power of the State became vested in the hands of three men of Sor, named Sukhrám Kharku, Píru Gosáin, and Bináyak Bhat. This Raja reigned but one year, and of this year we have a grant of his, giving lands to the family of Dámu Pánde, and dated in 1547 Saka, corresponding to 1625 A.D. He married a daughter of the great Badgujar house of Anúpshahr in the Bulandshahr district,[1] and his ministers, resolved on keeping the power in their own hands, shut up the young Raja in the women's apartments of his palace, which they took care to fill with attractions which made him oblivious, for the time, of the outer world. One member of

[1] Gaz., III., 63.

the royal family, Níl Gosáin, a son of Lakshmi Chand, protested against this treatment of the head of the State. Him they seized and blinded with the concurrence of the Raja and then proceeded to exterminate all the near male relations of Bijaya Chand. Trimal Chand, another son of Lakshmi Chand, succeeded in escaping to Garhwál, while Nárayan Chand, his brother, found a safe asylum in the Mal of Doti, and the son of Níl Gosáin, afterwards known as Báz Bahádur Chand, through the good offices of a palace slave, was taken care of by a Tiwári woman, the wife of his purohit. The Raja of Garhwál offered to aid Trimal Chand if he agreed in writing to consider the western Rámganga to be for ever the boundary of the two kingdoms, but after consultation with the Joshis of Galli and Jhijár, Trimal Chand refused, for they said from his horoscope it was certain that he would become Raja of Kumaon and it was wrong for him to trammel his future action by an engagement of this sort. He then went to Barhapur at the foot of the Garhwál hills and commenced to levy a force. Bijaya Chand in the meantime continued to amuse himself with his women, and the only noteworthy act of his reign was the building of the entrance gate to the fort of Almora. Even this slight attempt at exercising authority was resented by his ministers, who resolved to kill him and place some younger member of the family on the throne. Sukhrám Kharku found means to enter the palace through the good offices of one of the female slaves (*ráj-cheli*)[1] and slew the Raja while, intoxicated with bhang, he slept in the inner apartment. This event occurred in 1625 A.D. Sukhrám then gave notice that the Raja had died suddenly and that he should continue to be chief of the administration until a proper successor to the Raja could be found. This conduct, however, was more than the people could bear. Both Márás and Phartiyáls resolved to act in the crisis; the former sent for Trimal Chand and the latter applied to Nárayan Chand, and each faction proclaimed its own favourite as Raja. The Márás with Trimal Chand first reached Almora, and though several of the Joshis who were not of his party counselled delay, as the constellations were not propitious, the full ceremony of

[1] The *ráj-chelis* or female slaves were usually of Garhwáli origin, as having no connection with either the Márás or Phartiyáls. They were particularly enjoined not to leave the palace or carry on intrigues with any one outside its walls. Those who acted as carriers of supplies from the royal stores to the kitchen were called Maida-páni *chelis*. The old name is *Ráj-cheri*, which has the same meaning as *Ráj-chokri*.

installation was proceeded with and not too soon, for almost before its conclusion Náráyan Chand and the Phartiyáls reached the ford accross the Suwál below Chína Khán. Náráyan Chand there received the news of the success of the Márás and at once fled back to the Mal of Doti, whilst his followers dispersed to their homes.

Trimal Chand, 1625-38 A.D.

Trimal Chand, though hardly guiltless of participation in the murder of his relative Bijaya Chand, resolved to gain some popularity by the punishment of the actual murderers. Sukhrám Kharku was taken and killed; Bináyak Bhat was blinded and his property was given over to one Mádhab Pánde; but Píru Gosáin was allowed to proceed to Allahabad on condition that he committed suicide there beneath the sacred fig-tree. Trimal Chand, while an exile in Garhwál, had written to Píru and promised him protection and advancement if he caused the death of Bijaya Chand and so prepared the way to the throne, and on this account Píru was allowed to retire to Prayág and die there, where suicide was lawful. The Joshis Narotam Jhijár and Dinkar Galli were appointed respectively Wazír and Chaudhri and Bitthal Gosáin became Diwán. The Sáhus and Ratgallis continued in charge of the records as usual and a descendant of Nalu Kathávat became darogha or chamberlain[1] of

[1] The following enumeration of the duties of darogha or chamberlain will give some idea of the arrangements of the royal household:—

1. He should see that the cook did his duty conscientiously and well.
2. He should have no dealings with either Márás or Phartiyáls.
3. He should tell the Raja everything he saw or heard.
4. Should not tell lies.
5. Should not repeat anything concerning what he might hear or see in the palace.
6. Should taste everything used for the Raja's food.
7. Should never allow the cook to be out of his sight.
8. Constantly to move about and threaten the servants, whether there was cause or not, so that no one might become careless.
9. Never to allow other than the regular servants on the establishment to have anything to do with the Raja's food.
10. Not to allow these servants to perform any other duty.
11. Only to enter the darbár at the prescribed times and not to go in and out as if it were an assembly in a private house.
12. Never to speak of poison, opium or bhang, nor to ever touch them.
13. To remain with the Raja at his meals and always treat him with due respect and no familiarity, watching his countenance for any signs indicating his wishes.
14. Should never on any occasions hold friendly converse with the people of Káli Kumaon or Sor or members of the Katyúri family or junior members of the reigning family, nor enter their houses.
15. Should only address the women of the palace with the greatest respect, and when duty leads him towards the female apartments should always proceed with downcast eyes and speak in a low voice.
16. Should never speak of spells (*mantras*), as they are only used for evil purposes, nor cut his nails nor shave within the limits of the palace.

the palace. We have a grant of Trimal Chand to the temple of Kedárnáth which was subsequently confirmed by Díp Chand, and but little else is recorded of him. He had no son, and unwilling to permit his rival of the Phartiyál faction to succeed him, he searched everywhere for other members of the Chand family and heard that one of them, Báz or Bája, son of Níl Gosáin, had been saved by a Tiwári woman. A deputation was sent to inquire where the young child was, which returned saying that the woman denied all knowledge of the child's existence. The Raja himself then went to the Tiwári's house and declaring that he had naught but good intentions and intended to make the boy his heir, Báz was produced and brought to court, where he was formally adopted as heir to the Raja with the title of Kunwar. One account is that the young Chand was concealed to avoid the general persecution of all members of the royal family begun by Sukhrám, and another story relates that when Níl Gosáin was blinded, the women of his female apartments were taken over by Bijaya Chand, and that a jealous concubine of the Raja stole the child and threw him over a precipice, where he was found uninjured by the wife of a Tiwári of Chausar, who brought him up as her own child. Another tradition again says that Báz Bahádur was a son of the Tiwári and no Chand at all. However this may be, he succeeded his adoptive father in 1638 A.D.

Baz Bahádur Chand, 1638-78 A.D.

During part of this period the Tarái is said to have attained to great prosperity and to have actually yielded the nine lakhs of rupees which gave it the name of Naulakhia Mal. This prosperity, however, excited the envy of the Hindus of Katehir, who with the connivance of their Mughal rulers gradually occupied the border villages of the Tarái. In this design they were much aided by the weakness of the Almora government during the previous twenty years. From the time of Lakshmi Chand, the Chands were occupied by internal quarrels and had neither the time nor the means to interfere with the Katehiris in their gradual encroachments on the lowlands. Alarmed at the progress that had been made by the Hindu chiefs of the plains and remembering the success which attended the personal suit of his predecessors, Báz Bahádur resolved to proceed to Dehli and invoked the aid of the Emperor Sháhjahán.

On his arrival he obtained an audience and presented his petition supported by many valuable presents, and was told to join the army then (1654-55 A.D.) proceeding against Garhwál. The Raja obeyed and in this expedition so distinguished himself that on his return to Dehli he was honoured by many signal marks of imperial favour and received the title of Bahádur and the right of having the great drum (*nakkára*) beaten before him. But not content with obtaining empty titles he is said to have adhered to the original object of his visit and procured the full recognition of his right to the Chaurási Mal, together with an order[1] addressed to the governor of the province for effectual aid against the Katehir chiefs. In this order Báz Bahádur was styled zamíndár of Kumaon. Rustam Khán, the founder of Moradabad and representative of the Emperor, aided the Raja, who succeeded in expelling his enemies and regaining possession of the Tarái. He then founded the town of Bázpur and appointed governors and a regular establishment to carry on the administration.

An account of Báz Bahádur's visit is told at some length by Ináyat Khán, the author of the *Shahjahán-námah*. He tells us that in 1654-55 A.D. Khalílullah Khán was despatched with eight thousand men for the purpose of coercing the zamíndár of Srinagar and was joined on his way by the zamíndár of Sirmor, Raja Sabhák Prakás. They proceeded through the Dún, and leaving a guard in an entrenched position near Kílaghar reached Bahádur Khánpur, "a place belonging to the Dún and lying between the Ganges and Jumna." The peasantry of the neighbourhood took refuge in the hills and forests and ravines, and refused to appear: so the troops were despatched against them to coerce them and inflicted "suitable chastisement." A number of them fell by the sword, others were taken prisoners and the remainder surrendered themselves, whilst immense herds of cattle fell into the hands of the victors. A second entrenchment was thrown up here, and leaving a sufficient guard the main body approached the town of Basantpur, which was also a depen-

Invasion of Garhwál.

[1] It is strange that not one of these *farmáns* has survived nor has any European ever been able to see even a copy of one. It is very unlikely that they were ever granted or, for that matter, asked for, as the zamíndárs of Kumaon held not only their hill but also their plains' possessions, independent of any title from Dehli by the right of occupancy of a tract of little value to any one else.

dency of the Dún, and halted half way up the hill.[1] Opposite the town a third redoubt was constructed and garrisoned, whilst Khalíl-ullah moved on to Sahijpur,[2] a place abounding in streams and fountains and clothed with flowers and verdure." Here he formed a fourth post and erected "a fort on the top of an embankment measuring a thousand yards in circumference and fifteen in height, that had in former times been crowned by a stronghold, inasmuch as some traces of the ancient works were still visible." On reaching the banks of the Ganges, a detachment of the royal artillery was sent across the river to take possession of the tháná of Chándi, which then belonged to Srinagar. Meanwhile Bahádur Chand, zamíndár of Kumaon, joined the imperial forces, and as soon as this fact was known at court, through the good offices of Khalílullah, a conciliatory *farmán* and a *khillat* set with jewels were sent to Bahádur Chand. The Dún was taken possession of, and the rains were about to commence, so an order was sent forbidding any further operations for the present. The Dún was then handed over to Chhatarbhúj, "who had expressed an ardent desire for it," and the *tháná* of Chándi was given to Nágar Dás, the chief of Hardwár. The Raja of Garhwál at this time was Prithi Sáh, of whom we have a grant dated in 1640 A.D., and who shortly afterwards became notorious for his conduct towards the unfortunate prince Sulaimán Shikoh. The expedition passed through the Western Dún to Dehra, and thence along the foot of the inner range to Basantpur, and thence to the Ganges near the usual crossing at Lachchhmán-jhúlá. There is no allusion to any grant of land to the Kumaon prince, and the conciliatory *farmán* that was really addressed to Bahádur Chand has done good service in the hill traditions as an actual grant to their reigning prince of the low country.

Extradition of Sulaimán Shikoh.

The episode of Sulaimán Shikoh, alluded to above, may be noticed as told by Káfi Khán.[3] The story of this unfortunate prince belongs to general

[1] The supply of ice for the royal use was obtained in the mountains of Tihri, whence it was despatched by porters to Damrás on the Jumna, a distance of sixteen *kos*. From Damrás it was packed in boxes and carried by raft on the Jumna for sixteen *kos* to Daryápur, one of the dependencies of parganah Khizrabad and thence reached Dehli in three days and nights. Dowson's Elliot, VII., 106. [2] Basantpur and Sahijpur both gave their names to separate parganahs in the Eastern Dún up to the last settlement and Kílághar may be identified with Kaulaghar near Dehra. [3] Dowson's Elliot, VII., 230; see also *Ibid.*, 131, 245, 263: Dow., III., 245, and Bernier.

history and need not be dwelt upon here. In his attempt to reach his father he had arrived at Hardwár; but, learning that a force had been despatched to intercept him, he turned off to the mountains of Srinagar. Here he neither obtained assistance nor shelter, and was deserted by several of his adherents. He then made for Allahabad, where he had the misfortune to lose more of his followers, and was obliged again to trust to the tender mercies of the Garhwális. Attended by Muhammad Sháh Koka and a few followers, he levied a contribution on the estate of the Kadsiya Begam and entered the hills for the last time. "The zamíndár of Srinagar coveted the money and jewels that he had with him and kept him as a sort of prisoner in his fort," and eventually delivered him up to an agent of the implacable Aurangzeb. Prithi Singh was certainly ordered by the Hindu minister, Raja Rámrúp, to deliver up the fugitive or stand the consequences; and his narrow escape some short time previously must have rendered him fully alive to what that might mean. Tarbiyat Khán was even sent to overrun his country, and it was then that Prithi Singh wrote through the medium of Raja Jai Singh, begging forgiveness for his offences and offering to give up Sulaimán Shikoh. Kunwar Rái Singh, son of Raja Jai Singh, was sent to fetch the royal prisoner, and safely lodged him in the fort of Gwalior, where he was assassinated by the orders of Aurangzeb in December, 1660 A.D. The treatment of Sulaimán by Pirthi Singh, Raja of Garhwál, will doubtless be compared with the courtesy and hospitality[1] shown to Khawás Khán by Mánik Chand, Raja of Kumaon, but the difference in the time and the circumstances of the two cases should be allowed to weigh against any harsh judgment on the Garhwáli prince. The latter was more exposed to the much more formidable power of Aurangzeb than the former was to the comparatively

[1] The Chand tradition is that Sulaimán applied first to Bahádur Chand, but when the Raja discovered that the prince was at enmity with the Emperor, he dismissed him loaded with presents to Garhwál; but in the meantime, it having become known that Sulaimán was in Kumaon, Aurangzeb sent an army which took possession of the low country and prepared to advance on Almora. One of the Raja's Mewáti guards stole the clothes of the leader of the Musalmán army while he slept at night, and brought them to the Raja, who returned them to the Mughal with a message that he had not harboured the fugitive prince; that he did not wish in any way to oppose the will of the Emperor; and that if he desired he could have killed the leader of the Imperial army as easily as he had stolen his clothes. Before this affair could be reported to Dehli the unfortunate prince had been surrendered to Aurangzeb, and the Mughal troops accordingly withdrew.

innocuous influence of Islám Sháh, who would not have had recourse to intrigue to demand the surrender of Khawás Khán had he been able to accomplish his designs by force. The Srinagar Raja was owner of a poor country, with few fighting men at his command, and had no means whereby he could withstand even a moderate force if sent into his country. Besides, he was not under such obligations to any of the Musalmán rulers as to lead him to consider it his duty to venture life and kingdom in support of their quarrels. All he desired was to live in peace with his powerful neighbours, who had already succeeded in making the aggressive and hated Raja of Kumaon their ally, and with an army at his very doors there was nothing left for him to do but to deliver up his unbidden guest.

Administration.

Báz Bahádur's orders regarding the administration of the Tarái were carefully executed by his officers. They were directed to make Rudrpur and Bázpur their residence during the cold season and Barakheri and Kota, on the spurs of the outer range of hills, their head-quarters during the hot weather and the rains. It is said that "every bígha and biswánsi was cultivated under his rule"; and Batten[1] notices that "at Kota, Barakheri and elsewhere in the lower hills are remains of forts and residences and mango groves which go far to show that the climate at those sites was not in former times so insalubrious as at present, when few men in power would confine their retreat from the Tarái heat to such low elevations in the mountains as these. Kota indeed is stated to have been the capital for all the western portion of the Chaurási Mal and to have given its name to the lower parganahs, and not only as now to the submontane region." Having perfected his arrangements in the plains, the Raja returned to Almora and there introduced the customs and fashions that he had seen in the camp of his friend Khalílullah Khán. He brought with him a considerable Musalmán following, some of whom he employed as drummers (*nakkárchi*), others as javelin-men (*chobdárs*), and others as actors and mimics (*bahurúpiya*). Amongst them were certain Hairis whom he settled in the Tarái as guards, and gave them land and the right to certain dues in lieu of a fixed salary. These were the ancestors of the thieving tribe of the same name who gave so much trouble to

[1] Rep. Kumaon, 168.

the administrators of the Tarái down to very recent times. He appointed a confectioner (*halwái*) for the palace and arranged the duties of all his household, for whose support he carried out the suggestion of Sakti Gosáin and assigned the revenues of specified villages and irrigated (*síra*) lands instead of a general tax on the whole country to supply the royal stores. Thus the villages whose revenues were applied to support the inmates of the female apartments (*deori*) were known as '*pál*.' The revenues of both Darkotiya and Silkaniya villages were appropriated to the support of the powder manufactory, and to a number of outlying villages known under the name of parganah Mahryúri was assigned the duty of carrying ammunition in time of war. Being desirous of standing well with the Dehli Court, Báz Bahádur introduced a poll-tax in 1672 A.D., the proceeds of which were regularly remitted as tribute to the Emperor.

Conquest of Bhot.

The good fortune of Báz Bahádur continued with him in all his expeditions. When he desired to wipe out the disgrace that had hitherto attended the Kumaon arms in their contest with Garhwál, he attacked at the same time both Badhán in the Pindar valley and Lobha, and was succesful enough to seize the important fort of Juniyagarh. To commemorate his victory he carried away with him the image of the goddess Nanda, which he established in the temple in the old fort of Almora with a proper train of flower-girls and female slaves, and which was subsequently removed to its present site by Mr. Traill. Báz Bahádur did not neglect his duty towards the gods, nor indeed was he forgetful of men of any degree who served him well. We have as many as sixteen separate grants[1] of

[1] The grants in the order of date are as follows:—

Date A.D.	*In favor of—*	*Date A.D.*	*In favor of—*
1640.	Trinet temple in Lakhanpur.	1665.	Family of Kamala Joshí.
1643.	Badrináth temple.	1666.	Briddh Kedár temple.
„	Ditto.	1670.	Family of the Tiwári.
1648.	Someswar temple.	„	Jageswar temple.
1654.	Pinnáth temple in Borárau.	1671.	Bágeswar temple.
1659.	Family of the Tiwári.	„	Family of Krishnanand Joshi.
1662.	Ditto.	1673.	Pilgrims to Mánasarowar.
1664.	Baleswar temple, Champáwat.	1675.	Family of Kulomani Pánde.

He roofed the temple of Jageswar with copper plates and built many wells (*naulas*) and temples, including those at Bhím Tal and Pinnáth. These grants were called *Katárdár*, or more correctly *Khanjardár*, from the dagger-shaped mark made by the Raja at the head. The *katár* and *khanjar* are two sorts of daggers. The Raja never signed his name to a grant, but in lieu thereof drew a rude figure of a dagger, the name and title being written in the body of the grant itself.

his dating from 1640 to 1675 A.D. Amongst them are three in favor of the family of Náráyan Tiwári, who brought him up as a child, and who is also said to have been a descendant of that Sri Chand Tiwári who received a portion of the Almora hill from the last Katyúri possessor. Báz Bahádur's religious feelings were continually wounded by the frequent complaints brought to him of the harsh and cruel conduct of the Húniyas towards pilgrims to the holy lake of Mánasarowar and Kailás, the abode of the gods. Having some leisure from more pressing occupations, he equipped an expedition which he led by the Juhár pass into Tibet, and besieged and captured the fort of Taklakhar, and it is said that the breach in the walls which by 'the extraordinary good fortune' of the Raja had been effected without difficulty remains unrepaired to the present day. He wrested the control over all the passes from the Húniyas and obliged them to promise to allow pilgrims to pass free to Mánasarowar. The Bhotiya traders used to pay a sort of tribute for permission to trade to the Tibetan authorities, and at first the Raja refused to allow this semblance of submission to continue, but finally it was agreed that so long as the Tibetan authorities threw no obstacles in the way of free communication, whether for the purposes of trade or of religion, the dues might be collected, as had been the case when Bhot belonged to Hundes. He also set apart the revenue of five villages near the passes (Pánchu, &c.,) for the purpose of providing pilgrims going to and returning from Mánasarowar with food, clothing, and lodging. He also investigated the tenure of the Rajbár of Askot and confirmed the orders made by his predecessors.

1670 A.D.

On his return to Almora, Báz Bahádur found that his enemies had been at work during his absence and had poisoned the mind of his eldest son, Udyot Chand, who was more than suspected of having designs on the throne. Udyot Chand was accordingly sent to Gangoli to Sarju-pár, to take charge of all the districts beyond the Sarju. Jhijár Joshis continued to monopolise all the chief offices in the State, and even the Chaudhris, Sáhus and Ratgallis, who were appointed to check and dispose of the grain collected as revenue, are said to have recognised these Joshis as their patrons and to have paid them dues. During Báz Bahádur's absence in Bhot the Garhwál

Invades Garhwál.

Raja had been maturing his preparations, and now by a rapid march surprised the Kumaon garrisons and recovered his territory. Báz Bahádur, however, quickly took the field, and sending a force into the Pindar valley under an experienced leader, himself took the route through the valley of the Rámganga and Lobha. The people of the Garhwál Pattis of Sábali and Bangársyún aided the Kumaonis, who, after some slight skirmishing, drove the Garhwális back to Srinagar itself. Here a hasty peace was patched up, to which the ignominy of its being signed in the enemy's capital gave no additional assurance. On his return from Garhwál, Báz Bahádur brought with him several Bisht families from Sábali and several Bangáras or Ráwats from Bangársyún, to whom he gave the office of heads (*sayánachari*) of the villages of Timli and Bharsoli respectively. The immigration of the Garhwáli Aswáls and Dungarwáls is also attributed to this time. It has already been mentioned that when Kírati Chand conquered Páli, the Katyúris were allowed to retire to Mánil and there they remained until this time; but Báz Bahádur, suspecting that they had given aid to the Garhwális in his late campaign, attacked their principal fort, which he captured and banished the inhabitants. Thus perished the last surviving remnant of Katyúri power in these hills. In 1672 A.D., the Raja led a force into the plains with which he ravaged the villages lying along the foot of the hills and is even said to have plundered Nagína in the Bijnor district.

Eastern Kumaon.

Affairs in the east again attracted his attention and led him to make a tour through his eastern parganahs. He had an interview with the Rainka Raja of Doti in Sor, and thence marched down by the Káli to Barmdeo. Here he found that the Raja of Chitona had built a fort at Kála Ghát on the ridge above Barmdeo and had advanced some pretensions to independence. Báz Bahádur promptly attacked the Raja, seized his fort and hanged him on the nearest tree, thus effectually securing the peace of the neighbourhood. The next year saw the Raja again in Gangoli, whence he invaded and annexed Byáns, making the same arrangements with the Tibetans that he had before done with regard to Juhár. He allowed the Bhotiyas to pay the usual dues (*sirti*) to the Húniyas, reserving to himself gold-dust (*phatang*), the pods of the musk-deer and

salt as revenue. Now comes the darker side of the picture, for now the Raja, at the instigation of an evil-minded Brahman, persecuted many innocent people. This Brahman persuaded the Raja that he could show him how to discover his friends from his enemies, and by his lying mummeries caused Báz Bahádur to put out the eyes of many good men. The Raja, however, discovered the deception that had been practised on him and punished the Brahman, and used every means in his power to remedy the evil that had been done by giving lands and pensions to the injured persons and their heirs. Hence the proverb still current in Kumaon:—

"baras bhaya usi budh gayi nasi,"

which means that with old age he lost his good sense and good fortune. In consequence of these acts the people became suspicious of the Raja and even doubted his repentance to be genuine: hence the proverb:—

"Jaiko bap rikhali kháyo
Ukála khura dekhe dara."

"He whose father the black bear hath eaten is frightened at a piece of charred wood," which corresponds with the English proverb that "a burned child dreads the fire." During the last year of his reign the Raja utterly broke down. Suspicious always of his son, whom he had banished to Gangoli, he also drove away all his old servants who, he said, were longing for his death, and died miserably alone and uncared for in Almora in the year 1678 A.D.

Udyot Chand, 1678-98 A.D.

Udyot Chand was at once recalled from Gangoli and ascended the throne without opposition and amid the general rejoicing of the people, who were glad that the gloomy old tyrant had ceased to exist. Like his predecessor he was a great friend of the priests and built and endowed many temples. We have sixteen grants[1] of

[1] The grants are in existence in the Almora archives and are as follows:—

Date A.D.	*In favor of—*
1678.	Family of Debi Datta Páthak.
1682.	Rámeswar temple in Bel.
„	Family of Shiusankar Tiwári.
1684.	Jágeswar temple.
„	Ditto.
1686.	Baleswar Thal temple.
1689.	Family of Krishnanand Joshi.
1690.	Dipchandeswar temple.
1691.	Pinnáth temple in Borárau.
1692.	Briddh Jageswar temple in Dárún.
1693.	Kalika temple in Gangoli Hát.
„	Ditto ditto
„	Bhaunáditya temple in Bel.
1695.	Rámeswar temple in Bel.
1697.	Family of Bhábdeo Pánde.
1690.	Nágarjun temple in Dwára.

his dating from the year of his accession to the year 1697 A.D. Dissatisfied with the conduct of the Garhwál Raja, Udyot Chand ravaged Badhán in 1678 A.D., but suffered the loss of his principal and favourite officer, Maisi Sáhu. He was more successful in the following year, when he entered Garhwál by Ganai and penetrated by Lobha to Chandpur, which he captured and plundered. The Garhwál Raja now sought aid elsewhere and entered into an offensive and defensive alliance with the Rainka Raja of Doti, under which (in 1680 A.D.) Kumaon was attacked on the east by the Doti Raja, who occupied Champáwat, and on the west by the Garhwál Raja, who again took possession of Dunagiri and Dwára. The war raged for two whole years, but in the end the Kumaonis were victorious against both their enemies. Henceforward garrisons were established in Dunagiri and Dwára on the west and in Sor, Champáwat, and Barmdeo along the Káli. The Raja, affected by the great and unhoped-for success of his efforts, gave due thanks to the gods and vowed a pilgrimage to the sacred Ganges at Dáranagar, but had hardly performed his ablutions and commenced his return journey when news was brought him that war had again broken out with Doti. Deo Pála was then Rainka, and taking advantage of the absence of Udyot Chand had invaded Káli Kumaon; but his success was very short-lived, for the Kumaonis drove the Dautiyáls across the Káli and in 1685 A.D. captured Ajmergarh near Dundoldhúra, the summer residence of the Raja and the place where the Chauntra now resides. The Rainka fled from Ajmer to Dipáil on the Seti river at the foot of the hills, where was his usual winter residence; but two years afterwards he was driven thence and compelled to take refuge in Khairágarh, the capital of the plains district of the same name in the province of Oudh. Udyot Chand captured Khairágarh in 1688 and the Rainka yielded and agreed to pay in future a tribute to the Kumaon Raja. These victories were celebrated with great pomp at Almora and were commemorated by the building of the new palace on the site now occupied by the Mission School at Almora and the erection of temples to Tripuri-sundari, Udyotchandeswar and Párbateswar close by, as well as the tank in the Raja's compound. In 1696 A.D. the Doti Raja repudiating the treaty of Khairágarh refused to pay the tribute that had been agreed upon and Udyot

Chand was obliged to lead in person his troops across the Káli. A battle was fought at Juráil between Dundoldhúra and the Kumaon frontier and with such ill success on the part of the Kumáonis that the Raja was obliged to hand over the command of his troops to Manorath and Siromani, Joshis of the Jhijár clan, whilst he himself returned to Almora for reinforcements. Shortly afterwards Siromani was murdered by the Dantiyáls and his troops dispersed and the Raja eventually recalled the remainder. Like his predecessor, Rudra Chand, Udyot Chand is celebrated for his patronage of learning and the encouragement he gave to wise and pious men to come and settle in Kumaon. He took great interest in the management of his possessions along the foot of the hills and to him are attributed the numerous groves of mangoes in the Kota Bhábar. Feeling his end approaching he devoted the last few months of his life to religious meditation and prayer and died in the year 1698 A.D., leaving his kingdom to his son Gyán Chand.

Gyán Chand, 1698-1708 A.D.

As in former times every Raja commenced his reign by an invasion of Doti, so now every successor to the throne of the Chands considered it to be his first duty to invade Garhwál. Gyán Chand began his reign by crossing into the valley of the Pindar and laying waste its fertile villages as far as Tharáli. The next year he crossed the Rámganga and plundered Sábali, Khátali and Saindhár in parganah Malla Salán, an attention which was returned in 1701 A.D. by the Garhwális, who overran Giwár and Chaukot in parganah Páli of Kumaon. Every year, one side or the other made marauding expeditions which served little except to render the lands near the borders of the two countries desolate. No one knew who should reap what had been sown, so that the more industrious part of the population abandoned the frontier tracts which in many places again became covered with jungle. In 1703, the Kumaonis were successful against the Garhwális in a battle fought at Duduli just above Mahalchauri. In the following year Gyán Chand sent his forces into the Bhábar and laid waste the low country belonging to Doti, but not without considerable loss from fever, the ill effects of which were long visible in those who recovered. In 1707, another great expedition was undertaken towards Garhwál, and this time

the Kumáoni forces took possession of Juniyagarh in Patti Bichhla Chaukot, and again passing the Panuwakhál and Diwáli Khál passes penetrated as far as Chandpur near Khál on the Bharárigár and razed the old fort to the ground. Gyán Chand has also left us grants of his which by their dates corroborate the local chronicles.[1] We have, one dated in 1701 A.D. granting lands to the family of Kulomani Pánde and another dated in 1703 A.D. giving lands to the family of Krishnanand Joshi. He also rebuilt the temples of Ganesh at Almora, Badrináth at Bágeswar and Baijnáth in Katyúr shortly before his death in 1708 A. D.

Jagat Chand, 1708-20 A.D.

Jagat Chand, said by some to be of spurious birth, succeeded Gyán Chand and also commenced his reign by an invasion of Garhwál; he plundered Lohba and took the fort of Lohbagarh at the head of the Panu wakhál pass, where he established a garrison. In the following year he pushed in by both Badhán and Lohba and uniting his forces at Simli, in the valley of the Pindar, proceeded by the Alaknanda to Srinagar, which he captured. The Garhwál Raja fled to Dehra Dún and Jagat Chand formally bestowed the town of Srinagar on a Brahman and divided the spoil he took in this expedition amongst his followers and the poor, reserving, however, a portion as a present for Muhammad Sháb, who was then Emperor of Dehli. He subsequently imposed a tax on gambling (*bachh*), which he also assigned as a *nazar* to the Dehli court. The name of Jagat Chand is still highly esteemed as that of a Raja who gained and held the affectionate remembrances of his subjects. He was kind to high and low alike and closely looked after the administration. In his days, the revenue of the Tarái is again mentioned as having been nine lakhs of rupees, but after this epoch, intestine disturbances became utterly destructive of all prosperity both in the highlands and lowlands. We have six grants of land[2] made by him dating from 1710 to 1718 A.D. He died of small-pox in 1720 A.D. and was succeeded by Debi Chand who, according to some, was an illegitimate son of Jagat Chand,

[1] The *naula* at Háwalbágh, now in ruins, was also built by him. [2] These grants in order of date are as follows :—

Date A.D.	*In favour of—*	*Date A.D.*	*In favour of—*
1710.	Purnagiri temple in Tallades.	1713.	Baijnáth temple.
1710.	Family of Debidatta Pánde.	1716.	Nágnáth temple in Chárál.
1712.	Bhrámari temple in Katyúr.	1718.	Bhuvaneswar temple in Gangoli.

Before proceeding further we must make such a survey of Garhwál history to the Gorkháli conquest as the scanty materials at our disposal will permit.

Garhwál. Fateh Sáh, 1684-1716 A.D.

From the local records of the Dún and the Saháranpur district we have the means of filling up broadly the history of lower Garhwál. On a previous page we left the Dún in the possession of Chhatarbhúj, whoever he may be, with the Hardwár chief at Chándi and Prithi Sáh in Garhwál. The last named was succeeded by Medini Sáh and he again by Fateh Sáh, who may, perhaps, be identified with the Fateh Singh who in 1692 A.D. led a memorable raid from the Dún into Saháranpur, whence he was with difficulty expelled by Sayyid Ali, the Imperial general. Fateh Sáh is also credited with the extension of his power into Tibet, and a hat, coat, sword and matchlock said to have belonged to him are still kept in the temple at Daba in Hundes. We have grants of this prince dated in 1685, 1706, 1710 and 1716 A.D., in which he is styled Phatepat Sáh. The war with Kumaon commenced in the reign of Prithi Sáh and was vigorously carried on by his successors. Fateh Sáh was a contemporary of Udyot, Gyán and Jagat Chand, Rajas of Kumaon, and was as often victor in the border fights as his opponents. On several occasions, he was able to hold a portion of the Kumaon territory for a considerable time and in 1710 A.D. addressed an order to the officer in command of the Badhán frontier, telling him to remember that the village of Garsár near Baijnáth in Patti Katyúr of Kumaon had been granted by him to the temple of Badrináth, and to see that it was not harried by either his troops or those of the enemy. Whether this was intended as a piece of bravado or not the fact remains that Fateh Sáh's donation was acted on and his deed has been produced in evidence in our courts to support the claim to hold the village free of revenue. During the reign of his predecessor, the Sikh Guru Rám Rái had taken up his residence at Dehra, and there he remained during the reign of Fateh Sáh. Guru Har Rái died in 1661, leaving two sons, Rám Rái and Harkishan, the former about fifteen years of age and the latter about six. Both claimed the succession, and as Rám Rái was the son of a handmaiden and not of a wife of

[1] Hamilton's Gazetteer, II., 636.

equal rank with the mother of Harkishan, so the latter was chosen to succeed their father. Rám Rái refused to abide by the election and disputes ran so high that it was agreed to refer the matter to the arbitration of Aurangzeb, who confirmed the election and sent Rám Rái away disappointed and resolved not to abandon his pretensions to the spiritual leadership of his sect. Harkishan died at Dehli in 1664 of small-pox and was succeeded by his uncle Tegh Bahádur, son of the great Guru Har Govind. Rám Rái recommenced his agitation and threatened not only the supremacy but the life of Tegh Bahádur, but the latter remained Guru of the Sikhs until his arrest and execution in 1675 A.D.[1] Aurangzeb was resolved to put down a sect the leaders of which were found to aspire to worldly as well as spiritual domination and who called themselves the '*Sachcha Pádsháh*,' the veritable kings. It was by his orders that Tegh Bahádur was executed, and at the same time he directed Rám Rái to retire to the wilderness of the Dún and to refrain from meddling in public affairs, or he should meet with a similar fate. Rám Rái obeyed the emperor's command and came to the Dún, and when, some twenty years later, Govind, the son of Tegh Bahádur, succeeded his father as Guru, the personal following of Rám Rái had dwindled to a few retainers and the adherents to his apostleship had declined into a mere sect of dissenters. Rám Rái resided a short time at Kándli on the Tons and then settled down in Khúrbura, now included in the town of Dehra. He built his temple at the village of Dhámúwála, around which grew up the town of Gurudwára, which with Khúrbura formed the nucleus of the modern town of Dehra. Fateh Sáh and his successors confirmed the possession of several villages for the support of the Mahant's retinue and the service of the temple and also erected and endowed a similar institution dedicated to Guru Rám Rái in Srinagar itself.

Pradip Sáh, 1717-72 A.D.

Fateh Sáh was succeeded by his son Dhalíp in 1717, of whom we have a grant of his dated in the same year. He could only have reigned for a few months when he was succeeded by his brother Upendra Sáh for a period of nine months, and he by his nephew Pradípt Sáh, son of Dhalíp. The last prince ruled Garhwál for over half a century,

[1] Cunningham's History of the Sikhs, p. 63.

for we have grants[1] made by him ranging from the year 1717 to the year 1772. During the latter part of his grandfather's reign and the earlier part of his own the Dún and Garhwál enjoyed a season of exceptional prosperity. Numbers of Rajpút and Gújar settlers reclaimed the waste land of the Dún and villages sprang up on all sides, so that in 1729 the gross revenue from some four hundred villages amounted to close upon Rs. 95,000. In 1747 we find the Dún assessed at Rs. 97,465, of which Rs. 42,845 were assigned away in revenue-free grants to religious establishments and individuals. This prosperity soon attracted the attention of Najíb-ud-daula, better known as Najíb Khán, the Rohilla chief of Saháranpur.[2] By the end of 1754, Najíb Khán had reduced the upper part of the Saháranpur district under his sway, and Chait Singh of Bahsúma, the last of the local chiefs who opposed, was forced to submit. In 1757, the Rohilla led his first expedition into the Dún and after a very feeble resistance on the part of the Garhwál Raja established his authority there.[3] The people speak of his rule with admiration and say that he protected the residents of the district, encouraged all classes alike to settle in the valley and provided them with land, fostered trade, dug canals, built wells and raised the revenue to a lakh and a quarter rupees without over-assessing the people. Mr. Williams[4] tells us that:—"the numerous mango topes and remains of tanks frequently found in the midst of what now seems a primeval forest warrant the statement that at this happy period there were five hundred estates in the Dún all under cultivation;" but it would be safer to assign these remains as well as those all along the border of the hills from the Ganges to the Sárda to an earlier and more primitive civilisation. He adds:—"Trade kept pace with agriculture and the term Hátnála (or pass by a market) still applied to Nágal, Rájpur, Bhagwantpur, Thánu and Bhárápur, preserves the recollection of the course taken by the stream of traffic to and from the hills. Najíb Khán died in 1770 and with him disappeared the

[1] I have grants of this Raja to Jilvesvar Mahádeo at Jilásu in 1725; to Kapila Muni at Srinagar in 1734; to Murli Manohar at Chandrapuri in 1745, and to Kamaleswar at Srinagar in 1753, taken from the records relating to revenue-free holdings decided by Traill in 1818. Some hundreds of these cases have been examined, but though older grants are mentioned, it is said that the originals were destroyed by the Gorkhális. [2] See Gaz., II., 250, for an account of the rise and fall of the Rohilla power in the Duáb. [3] Mr. Shore to Government: 28th January, 1824. [4] Memoir, 97.

prosperity of the Dún. Pradípt Sáh was now an old man and little inclined to undertake the task of gathering up the scattered threads of government thus suddenly placed within his reach. He died in 1772 and was succeeded by his son Lalat or Lalíta Sáh.

Lalat Sáh, 1772-80 A.D.

Of Lalat Sáh we possess a grant dated in 1779 bestowing lands on the temple of Nanda at Krúr in Dasoli and another in the following year in favor of the Bhairáva of Langúrgarh. He also took little notice of Dún affairs, which rapidly proceeded from bad to worse, so that from his inattention or as others say from his oppression of the Musalmán peasantry, the Dún again became a wilderness. The influence of the Mahant of the Sikh temple became supreme and the seat of government was changed from Nawáda to the little town around the temple which now received and retained henceforth the name of Dehra. For many years now the Dún became the happy hunting-grounds of Gújar and Sikh marauders. In 1775, and again in 1783, the Sikhs swept through the valley, plundering, murdering and burning as they went. They never attempted to settle in the valley and in the latter year spared not even the houses clustering around the Gurudwára, though respecting the temple itself in which the inhabitants had stored their valuables for protection. The Garhwál Raja was unable to afford the people protection or at least never appears to have tried to restrain the inroads of the marauders, and at last bought them off by an annual payment of Rs. 4,000 to their principal sardárs. Forster[1] the traveller happened to be present when two Sikh tax-collectors appeared to receive the customary tribute. They foddered their horses with green barley torn from the standing crops, and so astonished was the Englishman with the awe in which they were held that he records the following characteristic note:—"From the manner in which these men were treated or rather treated themselves I frequently wished for the power of migrating into the body of a Sikh for a few weeks." Mr. Williams writes[2] of this period:—"The raids of the Rajpúts and Gújars from Saháranpur did more mischief than the Sikh incursions. They were not petty enterprises of no greater dignity than common gang-robberies, but regular invasions on a small scale, organised by men

[1] Travels, I., 199, quoted by Mr. Williams in Memoir, 100. [2] *Ibid.*

of consequence who were able to lead into the field miniature armies composed of horse and foot in due proportion. These were days when a Rajpút or Gújar chieftain could, at a pinch, muster one thousand fighting men. Against such a force the people of the Dún were helpless, although they occasionally attempted reprisals * * *. The banditti plied their trade through the two passes most used in the present century for purposes of peaceful traffic—those of Timli and Mohan. The defiles of Kánsrao and Hardwár were at first less frequented, but when the Khúbar Gújars gained strength at the expense of the Pundírs, Raja Rámdayál Singh of Landhaura appropriated these two gorges to his own use and began to exercise his hereditary profession of robbery in the intervals between his graver occupations in the capacity of talukadár. The Garhwál Raja far too weak to attempt resistance submitted to the necessity of handing over a few villages to each of the offending chiefs in *jágír*, on condition of their guarding each pass against marauders belonging to their own or other clans. In this manner Guláb Singh, the Pundír Rána, obtained twelve villages with the hand of Lalat Sáh's daughter in marriage, and his son Bahádur Singh actually got the fiscal management of the Dún in 1787." Two villages alone remain to his descendant Pitambar Singh. Rámdayál Singh obtained five villages and others were divided amongst the Ráos of Kheri, Sakhrauda and Ráipur in the Saháranpur district.[1]

Jayakrit Sáh, 1780-85 A.D.

The fights of the Garhwális with the Kumaonis are noticed elsewhere, and on the murder of Díp Chand the friends of his family applied to Lalat Sáh for assistance and after some hesitation he consented to interfere in Kumaon affairs. He defeated the troops of the usurper Mohan Singh at Bágwáli Pokhar in 1779 and permitted his son Pradhuman to become Raja of Kumaon. Lalat Sáh had four sons—Jayakrit, Pradhuman, Parákram and Prítam. Jayakrit Sáh succeeded his father in 1780, and of him we have grants dating from 1780 to 1785. In the latter year the invasion celebrated as "the Joshiyána" took place, in which the Kumaonis swept through the country and occupied

Pradhuman Sáh, 1785-1804 A.D.

[1] Most of these were confirmed by the Gorkhális, but were resumed by the British after the conquest.

Srinagar tself, and Jayakrit Sáh was murdered or according to others died of chagrin and fatigue. His brother Pradhuman united for a whole year the two countries under his personal sway, but harassed on the one hand by the pretensions of his brother Parákram and on the other by the attacks of the party favourable to Mohan Singh, he abandoned Kumaon altogether in 1786 and took up his residence permanently at Srinagar. Here there was plenty of work to occupy his talents and energy had he possessed any.

Ghulám Kádir.

The notorious Ghulám Kádir succeeded[1] his father Zábita Khán in 1785, and desirous of emulating the successes of his grandfather Najíb Khán undertook the reduction of the chiefs that lay between him and the Siwaliks, who had taken the opportunity afforded by the recent troubles to declare their independence. In 1786, he invaded the Dún and reannexed it to his possessions. Mr. Williams describes this second Rohilla inroad thus:—"Accompanied by his Hindu adviser Raja Muniyár Singh, Ghulám Kádir entered the valley from Hardwár about the middle of the year. Fire and bloodshed marked his onward progress. Not content with sacking Dehra, he gutted the Gurudwára. Cow's blood profaned Rám Rái's holy shrine and the conqueror, it is said, otherwise expressed his contempt for superstition in an extravagant fashion, smashing the Mahant's cithern and reclining disdainfully on the couch where the saint breathed his last. It is an article of faith with many orthodox Hindús that God, as a punishment, smote the sacriligeous Nawáb with the madness which drove him to destruction. He nevertheless gave evidence of sound judgment by entrusting the administration of his easy conquest to a Hindu deputy named Umed Singh, who served him most faithfully to the day of his death (1789) * * *. After the death of Ghulám Kádir, Umed Singh courted the friendship of Pradhuman Sáh, to whom the district once more became nominally subject, but about three years later he betrayed his new master to the Raja of Sirmor, who proclaimed his own government in the Dún and, it is alleged, deputed a representative to live at Pirthipur. Pradhuman Sáh had recourse to an alliance with the Maráthas, who glad of an opportunity for plunder

Umed Singh.

[1] Gaz., II., 251.

hastened to his assistance, but merely amused him and retired after a few skirmishes with the Sirmor troops, without effecting anything decisive. Umed Singh was thus enabled to maintain the authority of his new patron several years longer until the Garhwál Raja again won him over to his side, giving him the hand of his daughter in marriage." The result of this was a retransfer of the Dún to Srinagar about the commencement of the present century. Umed Singh was again preparing to prove a traitor when the Gorkhális stepped in and seized the Dún amongst their conquests.

The valley all this time belonged to any one bold enough to enter it and strong enough to encounter the little opposition that could be made. Mr. Williams, writes:—"The Sikh incursions continued while the hungry Rajpúts and Gújars of Saháranpur emulated the activity of the Singhs. Whenever any delay occurred about the payment of blackmail, fifty or a hundred Panjábi troopers generally sufficed to sweep the country clear. The operations of the others were, as already noticed, sometimes conducted in a more ambitious style. Whatever slipped through the fingers of the professional spoiler fell into the hands of the official harpy. The *amil*, for the time being, was his own master and collected booty with all possible expedition, not knowing the moment when he might suddenly fall a prey to some other more influential or cunning than himself. The original owners retained few villages and almost all records of right perished." Amongst the more notorious of these oppressors of the country the names of Hari Singh of Guler and son-in-law of Pradhuman Sáh and that of Rámdayál Singh of Landhaura stand out prominently, and between them the annual revenue was reduced as low as Rs. 8,000 a year. In 1801 a Marátha invasion destroyed what little had been left and paved the way for the Gorkháli invasion two years afterwards. Captain Hardwicke visited Garhwál in 1796 and gives some account of the district in a description[2] of his journey from Khohdwára to Srinagar. His impressions of the people and country do not give one a high idea either of their condition or character. The smallness of the

Sikhs, Gújars.

[1] Memoir, 102: based on Mr. Shore's Report, dated 28th January, 1824.
[2] As. Res., I., 309, 8vo. ed.

villages that he saw along the road is remarkedby him; they seldom consisted of more than five or six huts, and he adds that a collection of ten huts would be considered a large village, but what chiefly struck him in the villages themselves was "the appearance of uncleanliness, indolence and poverty." Then as now the upper story of the house contained the sleeping and living apartments, whilst the lower story was occupied by the cattle. The standing forces of the Raja consisted of some five thousand men, of whom one thousand were stationed at Srinagar and the remainder throughout the several parganas, to assist in the collection of the revenue and to garrison the frontier posts along the Rámganga. The troops were armed with matchlocks or bows and arrows or with sword and shield, which last were evidently the established and favourite weapons of the country. There was no attempt at uniformity in dress or discipline and pay was seldom regularly distributed. The pay of the troops at Srinagar as well as that of many of the servants connected with the palace was met by orders on the different parganas, and Hardwicke notes that he met several dancing-girls and musicians "travelling perhaps twenty or thirty *kos* with an order on some zamindár for three or four months' arrears of pay." Having brought the local history of Garhwál down to the Gorkháli conquest, we may now return to Kumaon affairs.

Debi Chand, 1720-26 A.D.

The decline of the Chand power commences from the accession of Debi Chand, for although like his predecessors he made the usual military promenade into Garhwál, the Garhwális recovered their possessions in Badhán and Lohba and even invaded the Baijnáth valley. A battle was fought near Ranchúla above the Baijnáth temple, in which the Kumáonis were successful; Debi Chand then demanded back Srinagar, from the Brahman to whom it had been given by his father, and on the Brahman refusing to return the gift, attempted to take the town, but was repulsed and driven back across the frontier. Debi Chand was a weak and irresolute prince and altogether in the hands of the advisers in power for the time being. In connection with his unsuccessful expedition against Srinagar, it is related that, like the king of France in the fable, he spread a quantity of carpets over a hill near his encampment and calling the summit Srinagar marched with his army to the attack, and in

commemoration of his bloodless victory called the place Fathpur, 'The place of victory'! The treasury of the Chands is said to have contained at this time three and a half krors of rupees, or taking the rupee nominally as worth eighteen pence over two and a half millions sterling. The Raja's fingers burned to dispense the savings of his ancestors, and urged by his Brahman advisers, he resolved to make a name for himself which would last for ever by paying off the debts of all his subjects and then founding a new era when all were at ease and no one was in debt, to be called 'the golden era.' In this senseless undertaking he expended a kror of rupees without gaining his object and without improving the resources of his unthrifty subjects.[1] The greater portion of the money found its way into the coffers of the Brahman money-lenders, who thus found themselves possessed of the only thing wanting to complete their preparations for the struggle for power which soon commenced. At this time the Gaira Bishts, Mánik and his son Puran Mall of Garhwáli origin were the principal advisers of the Raja, and through their influence he was induced to take a part in the political struggles going on in the plains. He was led to believe that the Raja of Kumaon was one of the greatest princes in the world, and taking the Afghán Dáúd Khán into his service, supported one Sábir Sháh,[2] in opposition to the Emperor. Azmat-ul-lah Khán was sent from Dehli to take possession of Rudrpur and Káshipur and Debi Chand marched with his troops from Almora to aid Dáúd Khán, who commanded the levies that held the plains parganas.[3] The Raja proclaimed his partisan Emperor of Dehli and met the imperial forces near Nagína with the intention of offering battle, but his wily Afghán general had received a bribe from Azmat-ul-lah Khán and before the battle commenced deserted the Raja with all his forces. The Kumáonis

[1] See p. 516, referring to the reputed treasures of the hill Rajas. The Nepál annals record that it was through a similar paying off of all the debts of the people that Vikramáditya established his era: p. 418. [2] Rustam Ali in the *Tárikh-i-Hindi* tells us that in 1726 A.D. "a person having assumed the name of Sábir Sháh went to Kumaon and represented to the Raja of that place, whose name was Debi Singh, that he was one of the princes of the house of Timúr, and thus obtained repeated orders on the functionaries below the hills at Káshipur and Rudrpur to the effect that they should give him a red tent, such as is usual for the royal family, as well as some troops to accompany him. Having carried these orders into effect they collected no less than 40,000 Rohillas." Shaikh Azmat-ul-lah Khán, who was then governor of Moradabad and Sambhal, was sent to quell the insurrection and in a single battle overthrew the Rohillas. Dowson's Elliott, VIII. 45. [3] Life of Hafiz Rahmat, p. 10: Hamilton's Rohillas, p. 35.

were accordingly defeated and Dáúd Khán not satisfied with mere treachery actually made an attempt to seize the person of his master as a hostage for the payment of the arrears due to the troops, but in this attempt he failed. The Raja retreated to Thákurdwára and pretending ignorance of Dáúd's treachery invited him to attend to receive his arrears of pay. Dáúd obeyed and was seized with all his followers and put to a cruel death, whilst the Kumáonis fled to Almora. Debi Chand next found himself attacked on the east by Doti and on the west by Garhwál. He made peace with Doti and entrusting the conduct of the war with Garhwál to his generals retired to the village of Debipur in Kota, where he had built himself a pleasure-house. Here, whatever happened, he remained during a portion of the cold-weather months of the last three years of his reign to indulge in the delights afforded by the female apartments, and here in the year 1726 A.D. he was murdered by Ranjít Patoliya at the instigation of his treacherous ministers. Mánik Bisht gave out that the Raja had died suddenly of snake-bite, and in the absence of heirs assumed the entire control of the administration. The wives of the Raja became *sati* and the Bishts believed that they had now little to do except to enjoy the power which they had so criminally acquired. In reviewing the events of the reign of Debi Chand the most charitable conclusion to arrive at is that he became insane at certain seasons, and that he should, therefore, not always be held morally responsible for his actions. Like his immediate predecessors he was exceedingly liberal to the temples and the priests. We have five grants of land made by him during his short reign, two of which bearing date in 1722 and 1726 A.D. respectively were in favour of the Jageswar temple; one dated in 1726 in favour of the Bhrámari temple; another dated in 1724 in favour of the Nar Singh temple in Tikhún, and a fifth in favour of the family of Prem Ballabh Pant dated in 1725 A.D.

Ajít Chand, 1726-29 A.D.

The Bishts then set themselves to search for some one having some connection with the Chand family whom they might place on the throne and thus rule through him as nominal Raja. Narpat Singh, Raja of Katehir, lived at Pípali and had married a daughter of Gyán Chand, of whom there was issue Ajít Singh, now grown to man's

estate. The choice of the Bishts fell on the young Thákur, who was called to Almora and installed as Raja under the name of Ajít Chand. The Bishts now gave themselves up to the full enjoyment of their ill-gotten power: they plundered the people under the name of the Rája, and taking to themselves Birbhadra Joshi as kámdár strictly kept the exercise of every semblance of power in their own hands. We have but one grant made by Ajít Chand, and that is only for a small parcel of land in favour of the Srináthes-war temple in Giwár in 1729 A.D. The female apartments of the Raja even were not safe from the licentious Bishts. Puran Mall formed an intrigue with a female slave of the inner apartments by whom he had a son, and to cover his crime brought a present to the Rája in honour of the child's birth. But the Raja was not deceived and denied his paternity and refused the present. Alarmed lest the Raja had discovered the real facts of the case, the Bishts took counsel together and determined on his death, a resolution which was at once carried into action. The self-same night they were introduced by a confederate into the inner apartments and there murdered the unfortunate Ajít Chand and gave out that he had died suddenly from natural causes. This event occurred in the beginning of the year 1729 A D. The murderers again looked out for a puppet to place upon the throne and were bold enough to ask the Katehir chief, Narpat Singh, for a second son, but the old Rája knew that his elder son had been murdered and refused the proffered dignity, saying, "My children are not goats that they should be sacrificed in this manner," alluding to the practice of sacrificing kids at all festive and religious assemblies in the hills. In default of the Katehiri prince, the Bishts had the hardihood to place the bastard son of the female slave on the throne as a son of Ajít Chand and with the name of Bálo Kalyán Chand, although he was only eighteen days old. They proclaimed themselves as previously regents of the kingdom during the minority of the young Raja, and in the insolence of their power issued grants in his name. Their triumph was short-lived. The Márás and Phartiyáls for once united and sent messengers to the Mal of Doti to search for any of the members of Náráyan Chand's family who had settled there. They discovered one Kalyán of that family living in great poverty and reduced almost to

till the ground with his own hands for a subsistence, and him they brought to Almora and installed as Raja under the name of Kalyán Chand.

Kalyán Chand, 1730-47 A.D.

Kalyán Chand became Raja in 1730 A.D., and as was natural set himself to punish the Bishts. Both Mánik and Puran were killed with all their families. The wife of Puran was given to a Búrha or headman and was pregnant at the time and subsequently gave birth to a son Bairisál, who long afterwards received back his father's possessions from Sib Deo Joshi. The poor little Raja Bálo Kalyán was given as a slave to a Musalmán javelin-man who was attached to the court, and so ended the Bisht interregnum. But the poor man now grown rich had tasted blood and to secure himself from rivals sent executioners throughout the land to slay all who had any pretensions to bear the name or be of the family of the Chands. From Dánpur to Kota and from Páli to Káli Kumáon there was wailing throughout the land, for families who had only the bare reputation of being of Chand descent were killed or exiled equally with the few families of genuine Ráotela origin. The Raja's spies were present in every village and every house and family found enemies amongst those of their own household. The informer was rewarded with the lands of those he betrayed, and like in the old days of Musalmán rule in the plains, when a contest occurred between Hindu brethren of the same faimly it was only necessary for one to apostatise to win his suit: so in Kumaon "in their good old days" it was only necessary for one brother to denounce the other, to obtain the whole inheritance. Worse than Rudra Chand in his old age, Kalyán felt himself unfitted by education and experience for the position he filled, and with the low cunning bred of ignorance and suffering believed his system of espionage the highest effort of political sagacity. But the chiefs of his spies were in reality his masters and used him solely as the means for satisfying private vengeance, lust or cupidity. Plots existed without doubt, but many more were fabricated and the *parvenu* Raja of doubtful origin scarcely dared to breathe much less to eat or drink without the exercise of precautions which must have made his life a burden to him. One day he learned from his chief of police that a great Brahman conspiracy threatened his life and

in a paroxysm of fear ordered that all concerned shall be blinded and their Khasiya adherents should be executed. The result was, it is said, that seven earthen vessels filled with the eyes of Brahmans were brought before him, whilst the bodies of scores of Khasyias filled the ravines of the Suwál and afforded food for many days to the jackals and the vultures. Bhawáni Pati Pánde of Bairti near Dwára is recorded as the leader in these persecutions.

Cruelty to Himmat Gosáin.

Kalyán next turned to the priests for assistance, and we have upwards of twenty grants[1] made by him during his reign to them or to temples. His favourite country residence was Binsar, where he built a temple to Mahádeo, but he had little time for leisure, for the officers of Nawáb Mansúr Ali Khán took possession of Sarbna and Bilhari and threatened the remainder of the Tarái. Kalyán Chand appointed Sib Deo Joshi his viceroy in the plains, and for some time this able officer made arrangements which put an end to the encroachments of the Oudh Darbár. During the Ráotela persecution in the earlier years of the reign of Kalyán Chand, one Himmat Gosáin,[2] blinded and otherwise injured, fled to the plains and now assembled a force of plainsmen and Kumáonis to attack the Raja. Kalyán Chand marched against them and defeated them near Káshipur and Himmat Gosáin retired to the court of Ali Muhammad Khán Rohilla at Aonla. Ali Muhammad did not forget the murder of his patron Dáúd Khán, and when Himmat begged for asistance gladly promised his aid. Kalyán heard of this and feeling that his tyrannical conduct had created many enemies tried to reform his administration. He began by dismissing his old advisers and gave full power to Sib Deo Joshi of Jijhár in the

[1] The following are the grants made by this Raja in order of date and which are still in existence in the Almora records:—

Date, A.D.	*In favour of—*
1731.	Jageswar temple.
„	Ditto.
„	Ditto.
„	Briddh Kedár temple.
„	Ganesh temple, Almora.
„	Ghatot-kacha temp'e in Bisang.
1732.	Family of Gangadatta Joshi.
1733.	Baleswar temple, Champáwat.
„	Family of Kulomani Pande.
„	Family of Bishnadatta Joshi.
1734.	Nágnáth temple in Chárál.
„	Kshetrpál temple in Borárau.
„	Bhuvaneswar temple in Gangoli.
1735.	Purnagiri in Tallades.
1736.	Ghatotkacha temple.
1737.	Sítala Devi temple in Baraun.
1740.	Kálika Sítala temple in Dwára.
1744.	Badrináth in Garhwál.
1745.	Kedárnáth in Garhwál.
1746.	Family of Debidatta Chaudhri.

[2] Called Duli Chand by the Rohilla historians.

Tarái, to Rámadatta Adhikári in the Kota Bhábar and to Hari Rám Joshi in Almora. He also bestowed lands on the families of his victims and endeavoured in every way to blot out the remembrance of his cruelties. His position was now critical, having the forces of Oudh and Ali Muhammad Khán opposed to him on his southern frontier; he had also to protect his eastern frontier, where the Doti Raja resented the exaltation of his former subject. Cunning and cruel, Kalyán despatched assassins into the Rohilla camp who murdered Himmat Gosáin and his family, but this act of his had an opposite effect to that intended.

Rohilla invasion, 1743-44 A.D.

Ali Muhammad Khán was enraged at the murder of a guest within his own camp and in 1743-44 A.D. sent a force of ten thousand men under the command of Háfiz Rahmat Khan, Páinda Khán and Bakshi Sirdár Khán to invade Kumáon. Previously Ali Muhammad made all arrangements for his plains possession during the absence of the force; he also forbade any one to join the army that was not enrolled and collected stores and carriage of all descriptions at Káshipur for the use of the expedition. On his side everything was done that could conduce to success, while on the other side, although Rám Datta Adhikári sent timely notice to his master and Sib Deo asked for money and promised that if he got it, the Rohillas should not invade Kumaon, nothing was done by the miserly prince. Kalyán Chand was persuaded that Sib Deo wanted the money only to pay off his own debts, and though he made some feeble attempts to fortify the hill passes by stockades and broke down the few bridges that existed, he sent no assistance to his officers. The Rohillas defeated Sib Deo at Rudrpur and obliged him to take refuge in the fort of Barakheri, and Háfiz Rahmat, leaving a governor in Rudrpur, pursued the Kumáonis and occupied Bijipur in pargana Chhakháta on the outer range of hills below Bhím Tál. The Raja alarmed at the success of the invaders at length sent a force to support Sib Deo and attack the Rohillas in Bijipur, but without a blow almost the Kumáonis fled at the first charge of the enemy and were pursued by Rámgarh and Piura to the Suwál river below Almora. Bakshi Sirdár Khán being of advanced age remained in command of a party in the

Barakheri fort which commands the route from the plains by Bhím Tál, while Háfiz Rahmat proceeded to Almora, which he occupied without opposition. Kalyán Chand fled to Gairsen near Lohba and entreated the protection of the Garhwál Raja, with whom he was now at peace.

Almora occupied.

The Musalmáns then destroyed all the idols in the temples, which they also defiled by the slaughter of cows, sprinkling the blood on the altars. All the gold and silver idols and their ornaments were melted down and plundering expeditions were sent into the neighbouring parganas for the same purpose; the noseless idols in Lakhanpur, Dwára, Katármal, Bhím Tál and Almora to the present day attest the iconoclastic proclivities of the Rohillás.[1] Ali Muhammad Khán was delighted at the successful result of this expedition and sent splendid presents to Háfiz Rahmat. During this time the old records were destroyed or lost and the few that remained were preserved in private families in distant portions of the province, so that on these alone have we been able to rely in drawing up this sketch of Kumaon history. Many of the Rohillas sickened and died from the effects of the climate, and though Ali Muhammad Khán himself came and distributed largesses to his troops, they were utterly disgusted at their position and longed to return to the plains.

Treaty with the Rohillas.

Sib Deo brought up a force from Sarbna and occupied Kairárau for a time, but eventually withdrew to his master at Gairsen. After some time the Raja of Garhwál agreed to assist the Kumáonis and the united forces marched eastwards and occupied Dúnagiri and Dwára. The Rohillas were in force in Kairárau and attacking the Hindus, utterly defeated them and plundered their camp. They then threatened to seize Srinagar itself and thus brought the Raja to terms by which he agreed to pay down three lakhs of rupees on the part of Kalyán Chand, and the Rohillas consented to abandon the country. The terms of the agreement[2] were carried out and

[1] The great temple of Jageswar is said to have escaped owing to the Rohillas having been attacked by great swarms of bees. [2] In the life of Háfiz Rahmat, the terms are said to be a tribute of Rs. 60,000 a year and an engagement not to assist Kalyán Chand, instead of whom another Raja was to be installed at Almora, p. 19.

after a stay of seven months the Rohillas, leaving a small garrison in Barakheri, returned to the plains, much to the chagrin and disgust of Ali Muhammad Khán, who wished to make a permanent occupation of the hill country, as he thought that it would afford him a safe asylum should anything go wrong with him in the plains. Kalyán Chand was escorted by Pradípt Sáh, Raja of Garhwál, to Almora and at once set about repairing the damages committed during the Rohilla occupation. Three months afterwards, whilst pressed by the troops of Muhammad Sháh, the Rohillas under Najíb Khán strengthened the garrison of Barakheri and sent a small detachment by the Kosi and the Káli to penetrate into the interior and form a basis of support should the Afghán forces be obliged to retire to the hills for protection. In the beginning of the year 1745 A. D. Sib Deo attacked the main body of the Rohillas under Rajab Khán close to the Barakheri fort, and after an obstinate struggle compelled them to retire to the plains, and on hearing of this the other parties of Rohillas also retreated. The Hindus of Katehir at this time made complaints to the Emperor Muhammad Sháh of the tyranny under which they suffered at the hands of the Afgháns and Kalyán Chand also sent an envoy to Dehli for the same purpose. The Emperor promised redress and further urged by the Oudh Nawáb, assembled a large army for the expulsion of the Afgháns from Katehir and encamped at Sambhal. Kalyán Chand hearing of this event resolved to plead his cause in person, and as he had no money he borrowed the jewels of the Jageswar temple to offer as a present and set out for the plains. At Rámnagar he met Sib Deo on his way back from Barakheri and took him in his train, which was increased at Káshipur by a guard of honor sent him by the Vazír Kumr-ud-dín. The Raja was admitted to an interview,[1] and though the extraordinary power of the Rohillas at this time was sufficient to awaken the jealousy and secure the intervention of the Imperial court, the representations of the Raja received further weight from the presence of twenty-two descendants of the old Hindu Rajas of Katehir, who headed by the aged chief of Thákurdwára demanded justice on their oppressors. Muhammad Sháh granted all that was asked for and is said

[1] The first interview was near Sambhal and the second at Garhmuktesar.

to have given to Kalyán Chand a fresh *sanad* for his plains possessions.

Quarrel with Oudh.

On his way back to Almora, Kalyán Chand had an interview with the Vazír Kumr-ud-dín near Garhmuktesar and thanked him for his good offices; unfortunately, however, the Oudh Nawáb was encamped close by, and as he was personally hostile to the Vâzír, the Rajá thought it politic not to pay a formal visit and merely sent his respects by an agent, an act which Mansúr Ali never forgave. Sib Deo was again invested with full authority in the plains and was about to repair the ravages which had been committed during his absence, but had not got so far as Sarbna when that pargana was occupied by the Oudh forces under the express orders of Mansúr Ali Khán himself. Sib Deo wrote to the Nawáb, representing that this tract had always formed an integral portion of the Kumaon territory and was also included in the *sanad* just granted by Muhammad Sháh; but without effect. He then had recourse to arms, and in a battle fought with Teju Gaur the Oudh chakladár was wounded and taken prisoner and remained for a whole year a captive in Oudh. Kalyán Chand complained to the Emperor, who induced the Oudh Nawáb to restore Sarbna and release Sib Deo, who again assumed control of the administration and, to strengthen his frontier, built forts at Rudrpur and Káshipur and placed considerable garrisons in them, each under a separate governor. Sarbna, Bilhari and Dhaner were given in zamíndári to a Barwaik family and the Tallades Bhábar was handed over to the Lúls of Káli Kumaon, both of whom exercised the police functions held elsewhere by the Heris and Mewátis. Kalyán Chand now became blind, a judgment of the gods, it was said, for his cruelty in blinding so many Brahmans, and finding his end approaching summoned Sib Deo to Almora and formally placed him in charge of his young son, who was installed as Raja of Kumaon under the name of Díp Chand, with Sib Deo as regent at the close of the year 1747 A.D.

Death of Kalyán Chand.

Kalyán Chand died early in 1748 A.D., and the same year saw the decease of both Muhammad Sháh and Ali Muhammad Khán. With his dying

breath the old Raja again committed to Sib Deo his son and family, entrusting to him all power and authority to be used and exercised on behalf of Díp Chand, and well was the trust fulfilled. Sib Deo gave eight villages to Jageswar in lieu of the money borrowed by Kalyán Chand and, so far as was possible, restored all property which had been unjustly confiscated by that Raja. He appointed his own son Jaikishan as his deputy in Almora and again proceeded to the Tarái, where he made his cousin Hari Rám Joshi governor of Káshipur, whilst he took up his quarters in Rudrpur, and on Hari Rám neglecting his duties exchanged the offices and appointed Siromani Das, a Brahman of Bázpur, his deputy in Káshipur. At this time the Emperor called on all his subjects to send contingents to assist him against the Maráthas, and Hari Rám and Bírbal Negi were sent with a force of four thousand men to the Emperor's support and took part in the battle of Pánipat (January, 1761 A.D.) Sib Deo also sent his son Harakdeo Joshi to hold Najíbabad, while Najíb-ud-daula was absent at Pánipat and there protected the Afghán's household from the attacks of foraging parties of Marátha horse. At Pánipat the Kumaonis were brigaded with their ancient enemies the Rohillas under Háfiz Rahmat, but both fought bravely together and the hill-men did good service, especially in the use of rockets and hand-grenades, with which they were familiar. After the battle the Emperor wished to see the Kumáoni leader and sent for him, but Háfiz Rahmat, being desirous that the interview should not take place, had previously sent off Hari Rám with presents as if from the Emperor, and in addition his own turban to exchange with Díp Chand and excused the absence of the hill-men to the Emperor, on the ground that he had advised them to return home, as they could not stand the heat of the plains.

Díp Chand, 1748-77 A.D.

Little has been said of Díp Chand himself hitherto and little can be said of him; he was a man of mild, weak temperament, generous and kind to a fault and beloved by all that came in contact with him. He was entirely in the hands of the priests, and we have more memorials of his reign in the shape of grants of land to temples and to favourites than of any of his predecessors. Thirty-six of these

grants[1] exist in the Almora records alone and date from 1749 to 1774 A.D. In the earlier years of his reign, he had ministers on whom he could rely, but when these failed him he was helpless. In the year 1762 peace and prosperity reigned throughout his dominions. The lowlands were in a flourishing state and the Kumaoni governors cultivated friendly relations with Háfiz Rahmat Khán, Najíb-ud-daula and the Imperial governor of Moradabad. Sib Deo and Hari Rám remained in the plains and kept up a standing army there, consisting for the most part of mercenaries from Jammu, Nagarkot, Guler and Barhepura, who so protected the people that numerous immigrants sought the shelter of the Kumaon authority in the Tarái. At this time the principal cultivators were the Thárus, Bhuksas, and Barwaiks, with a considerable admixture of settlers from the south both Hindu and Musalmán. The only tax imposed was one-sixth of the produce and in unfavourable seasons even this was remitted. Hari Rám was obliged to leave Rudrpur during the rains, but Sib Deo remained all the year round at Káshipur. The Márás had now a long season of power and the Phartiyáls resolved in some way or another to make a bold attempt for a share, as the Raja was practically ruled by whichever party should succeed in obtaining the nominal office of Diwán. They put forward Amar Singh Ráotela as a competitor for the throne, but this nascent rebellion was quelled with a strong hand by Sib Deo. This brave old man had now to

[1] The following is a list of these grants arranged in order of date and each will be found in Traill's record of the investigation into the case to which it refers in the Almora records:—

Date, A.D.	*In favour of—*
1749.	Badrináth temple.
1752.	Kedárnáth temple.
„	Jageswar temple.
„	Ditto.
1753.	Bágeswar temple.
1754	Family of Bishandatta Joshi.
1755.	Badrináth temple.
„	Briddh Jageswar temple
„	Gananáth temple in Borárau.
1756.	Family of Benirám Upreti.
„	Briddh Jageswar temple.
1757.	Náráyan temple in Lakhanpur.
„	Jageswar temple.
„	Family of Bishandatta Joshi.
1758.	Jageswar temple.
„	Punagiri temple in Tallades.
„	Pinnáth temple in Borárau.
1759.	Jageswar temple.
1759.	Nágnáth temple.
„	Kalika Devi in Gangoli.
1760.	Kedárnáth temple.
„	Udeswar temple in Sálam.
„	Family of Debidatta Tiwari.
1763.	Family of Jairám.
1764.	Kálika Sítala temple in Dwára.
1765.	Jageswar temple.
1766.	Ditto.
1767.	Bhímeswar temple at Bhím Tál.
1768.	Family of Gangadatta Joshi
1769.	Family of Krishnanand Joshi.
1770.	Family of Rádhapati Bhandári.
1771.	Family of Rewadhar Joshi.
1772.	Family of Shivsankar Tewári.
„	Kálika temple in Gangoli.
1773.	Bhaineswar temple in Borárau.
1774.	Family of Kamalapatii Upreti.

feel the ingratitude of his own near relations, for Jaikishan Joshi, himself a Mára, joined by a number of Phartiyáls, went to the Garhwal Raja, Pradípt Sáh, and induced him to invade Kumaon. Pradípt Sáh came to Jhuniyagarh, which was then in his possession, and Sib Deo with the Rája occupied Naithána in Patti Dora Palla close by. Sib Deo left Díp Chand at Naithána and with the greater part of his force advanced and occupied Jaspur on the Másí road, above the confluence of the Bino and the Ramganga. He then sent an envoy to the Garhwál Raja demanding the cause of his thus disturbing the peace of Kumaon. Pradípt Sáh replied that Kalyán Chand was his brother and he looked on Díp Chand as his nephew, and that if Díp Chand wrote to him in the terms of such a relationship he would retire. This was practically asking that the Raja of Kumaon should acknowledge the supremacy of Garhwál. Pradípt Sáh also demanded that the Rámganga should henceforth be considered the boundary between Kumaon and Garhwál and threatened that if this were not granted he would seize the whole of Kumaon. Sib Deo agreed to the second proposal alone, but the Garhwál Raja and his advisers were prepared for war and a battle was fought at Tanba Dhond, the hill above Udepur on the Másí road in Patti Bichhla Chaukot, with the result that the Garhwális lost some four hundred men and amongst the prisoners was Jaikishan. The Garhwál Raja fled to Srinagar and eventually peace was concluded on such satisfactory terms that Pradípt Sáh exchanged turbans with both Díp Chand and Sib Deo.[1]

Internal quarrels.

No sooner was the quarrel with Garhwál settled than internal commotions arose in Kumaon itself which ended in the assassination of the principal actors, and gave some excuse for the invasion of the Gorkhális in 1790 when Kumaon ceased for ever to be independent. Hari Rám Joshi was always jealous of Sib Deo's reputation and power. When first appointed to the command of the fort of Káshipur, he neglected his duty and permitted a low Musalmán adventurer to administer the district in his name and plunder the people as he liked. In consequence of this, Sib Deo exchanged offices with

[1] One of the Brahmans whose eyes had been put out by Kalyán Chand, by name Kantu Joshi, fled to Garhwal and died there. His son Jayanand was now called back by Sib Deo and restored to the family estates.

Hari Rám, but the latter never forgot the slight put upon him by his cousin, and now took up arms against him. It is said that the cousins fought seven great battles, in two of which only Sib Deo claimed the victory. The seventh battle took place near the confluence of the Gagás and the Dosándhgár at Báns-ke-sira, and here Jairám, son of Hari Rám, and the principal mover in the quarrel, with 1,500 men, lost their lives. Hari Rám at once gave himself up to Sib Deo and both agreed to refer their quarrel to the arbitration of Háfiz Rahmat Khán, who obliged Hari Rám to give Sib Deo a bond that he would ever afterwards faithfully obey him. Sib Deo was now, once more, *de facto* ruler of Kumaon; but he had many active and unscrupulous enemies who continually plotted against him, so that he was at length obliged to have recourse to measures of repression, which only increased the number of his enemies without ensuring his own safety. Foremost amongst the conspirators were the Phartiyáls of Káli Kumaon. One of these, named Rai Mall, the Búrha or head-man of the village of Choki in Káli Kumaon, wrote to a friend in Káshipur, telling him that should he organise a conspiracy against Sib Deo he might feel himself certain of the support of the entire faction in Káli Kumaon. The letter, however, miscarried, and the plot was discovered. Sib Deo believed that there were others concerned in these plots, and hastening to Almora instituted inquiries which resulted in the detection of a second conspiracy in which the Duniya Joshis were concerned. He seized the ringleaders, and after a somewhat perfunctory trial condemned them to death. The mode of execution adopted was singular and well calculated to strike terror into the hearts of his enemies. He caused the prisoners to be brought to Bálighát above Bágeswar on the Sarju, and there tied them up in sacks and hurled them alive into the seething whirpool below the cliff. The news of this affair spread quickly throughout the province, checking for a time any overt act of disaffection, but as surely increasing the efforts of those who worked in secret. Some remorse seems to have visited Sib Deo, for he released all the minor actors in the plots and sought to secure their allegiance by restoring their property to them. Rái Mall Búrha fled to Doti, and his prominent partisans disappeared for a time.

Murder of Sib Deo.

Notwithstanding these plots, the power of Sib Deo seems to have been as great as ever, and village after village was granted to him by his grateful sovereign. Besides his estates in the Tarái, he held Gangola-Kotuli in Malla Syúnara, several villages in Bárahmandal and small grants elsewhere. He now rearranged the administration at Almora and set out for the plains which required his presence as he had heard that the mercenaries from Nagarkot and elsewhere, who formed the garrisons of the forts in the Bhábar and Tarái, were at the instigation of the Phartiyáls clamouring for increased pay. Sib Deo advanced by forced marches to Káshipur, and there summoned those whom he felt would support him, but before any one arrived the soldiery rose in revolt and murdered Sib Deo and two of his sons. This event happened in the cold weather of 1764 (11th of Pús, 1821 Sambat), and was followed soon afterwards by the death of Hari Rám. From this date the dependence of the plains on the Hill State may be said to have ceased and determined, and from this period, too, internal commotions so distracted the highlands that there also merely the semblance of a stable government remained. Jaikishan succeeded his father as prime minister and vicerory, and continued to hold the reins of government for some two years and a half when a son was born to Díp Chand. The mother of the boy, the Ráni Sringár-Manjari, then acquired great influence over the Raja, and considering that in consequence of her being the mother of the heir to the throne she should have a share in the government, intrigued with Háfiz Rahmat Khán Rohilla to oust Jaikishan. It is said that Háfiz Rahmat, at the instigation of Jodha Singh Katehiri, his favourite servant, and whose son was betrothed to a daughter of the Raja Díp Chand and therefore belonged to the Ráni's faction, wrote to Jaikishan and advised him to submit to the Ráni. The result was that Jaikishan threw up all his offices, and disgusted and disappointed left Almora to the Ráni and her friends.

Mohan-Singh murders the Ráni.

Mohan Singh, whom Batten calls "the spuriously descended cousin of Díp Chand," and for whom the chroniclers of his own party can give no higher origin than that he was descended from a Ráotela family of obscure descent who had settled at Simalkha on the Kosi, became

bakshi or head of the army. Kishan Singh, the Raja's bastard brother, became prime minister, whilst Parmanand Bisht, the paramour of the Ráni, was appointed viceroy, and Jodha Singh obtained the government of Káshipur.[1] Thus the Ráni's party was completely successful, but had hardly enjoyed their position for a year when the intrigues of Parmanand deprived Mohan Singh of his appointment. Mohan Singh fled to Rohilkhand, and his place was taken for a time by Parmanand and then by Jaikishan and Harak Deb. In the meantime Mohan Singh, through the assistance of Dúndi Khán, of Bisauli, who was jealous of the power and influence exercised by Háfiz Rahmat Khán in Kumaon affairs, assembled a force of Rohillas and hillmen, and, eight months after the expulsion of Mohan Singh, captured Almora and the persons of the Raja and Ráni. According to other accounts, Mohan Singh was invited to Almora by the sons of Sib Deb, and the Ráni once more entrusted to him the office of bakshi on his swearing fidelity to Díp Chand and his family.[2] However this may be, Mohan Singh so firmly established himself as head of the government that he was able to put to death his enemy Parmanand Bisht with impunity. Emboldened by this success, and believing that the Ráni was still plotting against him, he shortly afterwards entered the women's apartments and seizing her by the hair of her head flung her out of the window and killed her. Thus, like Jezebel of old, the Ráni Sringár-Munjari perished a victim to her own self-indulgence and desire for power.

Harak Deb Joshi.

Háfiz Rahmat Khán hearing of the state of affairs in Kumaon, and finding that his old friend Díp Chand was now only a puppet in the hands of designing adventurers, sent for the sons of Sib Deb and counselled them to make some attempt to recover the power once exercised by their family. Aided also by Kishan Singh, who had fled from Almora on the murder of his friend the Ráni, the Joshis enlisted a numerous following with which they invaded Kumaon and expelled Mohan Singh, who sought safety at first with Zábita Khán and then with the Oudh Nawáb. Díp Chand was so pleased with

[1] See report of Mr. W. Fraser in the records of the Commissioner of Kumaon; Government to the Hon'ble E. Gardner, dated 22nd November, 1814.
[2] This account is hardly correct, as the interests of the sons of Sib Deb were then and ever afterwards opposed to those of Mohan Singh.

the change that he desired to confer the two principal posts in the administration on the Joshi brothers with Kishan Singh as viceroy, but Jaikishan refused to serve with Kishan Singh, and thus it became necessary again to place the two offices of prime minister and head of the forces in the charge of one person. Harak Deb accepted this position and appointed as his deputies a Bisht of Chapuwa and Lakshmipati Joshi. The Bázpur Brahman Siromani Dás, now Diwán Siromani Dás, who had aided in the attack on Mohan Singh, was confirmed in his appointment of governor of Káshipur, with a grant of eight villages as well as the confiscated *jágír* of Mohan Singh. Manorath Joshi, son of Hari Rám, was made sardár of Rudrpur, and once more a certain semblance of order and good government began to make itself manifest in the administration of public affairs both in the plains and the hills. Shortly afterwards Siromani Dás died and was succeeded by his son Nandrám, who, with his brother Har Gobind, was resolved, should an opportunity occur in the present unsettled state of affairs, to carve out for themselves, as their neighbours on all sides were doing, an estate which they might, perhaps, be able to transmit to their children. They called for still more recruits from Nagarkot, and also enlisted a large number of the roving mercenary bands which the wars in the plains had created, and who were only too glad to accept service where fighting and plunder might be expected.

Mohan Singh returns to Almora.

At this time Mohan Singh wrote to both Jaikishan and Harak Deb asking for forgiveness and begging them to allow him once more to return to Kumaon. He had, moreover, induced many of the more influential men, disgusted as they were by the conduct of Kishan Singh, to join in asking for his recall, and though Harak Deb merely sent a courteous but evasive reply, Jaikishan was imprudent enough to invite this arch dissembler back to Kumaon. On his way to the hills, Mohan Singh visited Nandrám at Káshipur and promised, in return for his assistance, to confirm that traitor in the government of the plains. On arriving at Almora, Mohan Singh almost at once assumed control of the administration, apparently with the consent of both Jaikishan and Harak Deb, who remained in office and assisted by their counsel

in the management of affairs. In the course of these consultations Jaikishan proposed that the Tarái should again be brought under the rule of Kumaon, and that an effort should be made to expel Nandrám, and in this resolution he was apparently warmly supported by Mohan Singh who offered to supply him with men and money for the expedition. Mohan Singh, however, wrote secretly to Nandrám, advising him to hold out and promising his aid should it be required, so that when Jaikishan reached the plains he found a strong force ready to oppose him posted at Halduwa between Chilkiya and Káshipur. In the fight that took place Jaikishan was worsted with the loss of the brother of Díp Chand who had accompanied the royal forces. Mohan Singh gained many advantages by this movement. The Joshi brothers were now separated, and means were found to make Almora so uncomfortable for Harak Deb that he was glad to take refuge in Páli. The unfortunate Raja himself was now alone and helpless in the hand of his gaoler, who sent him with his two sons, Udai Chand and Sujún Singh Gosáin, to the State prison of Sirakot. Mohan Singh believed that the time had come when he might throw off all semblance of submission and loyalty and look after his personal aggrandisement alone, but resolved first of all to secure his position at Almora. For this purpose it was necessary to paralyse the influence of the Joshi brothers, and this could best be effected by the death of one or both. Mohan Singh accordingly proceeded to Kumkhet, a village on the southern face of the Gágas range in parganah Kota, and, under pretence of concerting a common attack on Nandrám and the rebels in the plains, invited Jaikishan to attend him. The Joshi at first refused, but overcome by the violent entreaties and protestations of Mohan Singh, at last yielded and came to Kumhket.

Murder of Jaikishan and Díp Chand.

Mohan Singh invited the unsuspecting victim into his tent and engaged him in an interesting and apparently friendly conversation, in the midst of which, at a prearranged signal, assassins entered and murdered Jaikishan. Mohan Singh then proceeded to Almora and seized Harak Deb, who had incautiously returned there, and would have murdered him also had not Lál Singh, Mohan Singh's own brother, interposed and induced him to commute the order to one of perpetual

imprisonment. Díp Chand and his two sons now died suddenly in confinement at Sírakot, and there can be little doubt but that their murder also must be added to the catalogue of crimes committed by the usurper. The tradition runs that the food supplied to the unfortunate prisoners was so bad in quality and so insufficient in quantity that they died of starvation, though violence also is said to have been resorted to. This event took place at the close of the year 1777 A. D.

Mohan Singh (Chand) 1777-79 A. D.

Mohan Singh now proclaimed himself Raja under the title of Mohan Chand and assumed all the insignia of a rightful ruler at his installation. We have ten grants of land made by him during the years 1777-78 A.D., which show that he was as anxious as any of his predecessors to purchase the protection of the gods.[1] He appointed his brother Lál Singh and Madhusudan Pánde of Patiya to the chief offices of the state and wrote to Nandrám in the terms of their agreement that "now the hills are mine and the lowlands of Káshipur are yours, let Gularghâti be our boundary." But Nandrám sought for some better authority than that of an usurper and proceeded to Lukhnow and offered the whole of the low country to the Nawáb, agreeing to hold from him as lessee (*ijráradár*) and to pay a considerable sum as revenue. The Nawáb nothing loth accepted the gift and directed his officers on the frontiers to assist Nandrám in all his undertakings and further appointed him his Amil for all the low country. Being thus supported Nandrám resolved to extend his possessions and instigated Mohan Singh to demand from Manorath Joshi, who still held Rudrpur, his entire submission to the *de facto* ruler of the Hill State. The Joshi indignantly refused and prepared to attack both Mohan Singh and his ally Nandrám, but was persuaded by the latter that he was in fact a secret enemy of Mohan Singh, and that if they joined their interests their united forces could easily overpower the usurper; and now that all the Chands were dead, the Joshis

[1] These grants in the order of date are as follows:—

Date A. D.	*In favor of—*
1777.	Jageswar temple.
Do.	Ditto.
Do.	Sitala Debi temple in Athâguli.
Do.	Family of Radhapati Bhandári.
Do.	Family of Husain Baksh.
1777.	Bhuvaneswar temple in Gangoli.
1778.	Nágnáth temple in Chárál.
Do	Kapileswar temple in Dúg.
Do.	Kalika temple in Gangoli
Do	Bhatneswar temple in Borárau.

might succeed to the throne of Kumaon. Manorath was credulous enough to trust these statements, and with a slight escort proceeded to Bázpur to meet Nandrám, where he was treacherously murdered with all his followers, and Nandrám took possession of Rudrpur in the name of the Nawáb. Thus passed away for ever even the nominal authority of the Hill State over the plains parganas. Nánakmatha and Bilhari were at this time supposed to be mortgaged to the Patháns of Bareilly and with Sarbna also fell into the hands of the Oudh Nawáb,[1] who remained suzerain of the Tarái until the British occupation in 1802 A. D., when Sib Lál, nephew of Nandrám and son of Har Gobind, was found in possession as farmer. Kilpuri alone remained for a time in the hands of Kumaoni landholders, but this also had to be yielded up to the Nawáb's agents.

No matter of general interest belongs to the local history of the Tarái during the period between the accession of Nandrám to the management and the British occupation. Mr. Batten's account of the administration of the Tarái during this time partially explains the causes of its diminished prosperity in modern times, of which some account will be given under the District notice. Mr. Batten considers that on the whole the rule of the Oudh Nawáb in the Tarái was beneficial, but chiefly from a negative point of view. He goes on to say—"The bad government of districts naturally more adapted for culture and habitation drove large colonies of people from the south to a region where the back-ground of the forest and the hills could always afford a shelter against open oppression; where the nature of the climate was not such as to invite thereto the oppressors into whose hands a whole fertile and salubrious land had fallen, and where also on this very account the rulers who did exist found it their interest to conciliate and attract all new-comers. The management of the territory in question by Nandrám and Sib Lál is generally well spoken of, except in the matter of police, but even in this latter respect the mismanagement was not more injurious to society than the state of affairs in regard to the forest banditti became in times not far distant from our own. I believe that it may be confidently stated that, at the commencement of the British rule in Rohilkhand,

Native administration of the Tarái.

[1] These changes never affected the upper part known as the Bhábar.

there existed in the Tarái a greater number of inhabited spots than there existed 30 years afterwards in the same tract; that more and more careful cultivation was visible in every direction; that the prairie, if not the forest, had retreated to a greater distance; that the *gúls* or canals for irrrigation were more frequent and better made; that more attention was paid to the construction and management of the embankments on the several streams; and that, finally, on account of all these circumstances, the naturally bad climate, now again deteriorated had somewhat improved. While recording this statement, I must not omit to add that I myself possess no positive separate proofs that my assertions are correct; but that I write under the influence of almost universal oral testimony supported, nevertheless, by this circumstance, *viz.*, that the revenue statistics of the tract under discussion shew a descending scale in regard to the income of the State, a product which, under general rules, bears an approximately regular proportion to the prosperity of a country."

Effect of earlier settlements.

"I must not omit to mention the fact that the Bhuksa and Tháru tribes are extremely migratory in their habits, and are peculiar in requiring at their several locations more land for their periodical tillage, than they can shew under cultivation at one time or in one year. To these tribes is in a great measure now left the occupation of the Tarái territory; so that now (1844) for every deserted village, there may be perhaps found a corresponding newly cultivated one, within the same area, and large spaces of waste may intervene, where under the present system no room for contemporaneous cultivation is supposed to exist, the periodical waste or fallow also, in that peculiar climate presenting as wild and jungly an appearance as the untouched prairie. In the times, on the contrary, which I have advantageously compared with our own, the fickle and unthrifty races whom I have named were not the sole occupants of the soil; all the number of contemporaneous settlements was therefore greater, and the extent of land required for each was less. I therefore come round in due course to the next fact (the obverse of that first stated) that as bad government in the ordinarily habitable parts of the country introduced an extraordinary number of ploughs into the borders of the forest-tract, so the

accession of the British rule, by affording a good government to Rohilkhand, re-attracted the agricultural resources to that quarter, and proportionately reduced the means of tillage in the Tarái. Such is my general position, but local circumstances also added to the deterioration, and amongst these an allusion on my part is all that is necessary or proper, to the hasty and perfunctory mode of settlement adopted in the earlier years of the British rule; to the disputes, in and out of Court, concerning zamindári rights, between Sib Lál and Lal Singh; and, again, between the latter and his nephew Mahendra Singh's family; to the continued bad police management; and perhaps more than all to the neglect and indifference of the English revenue officers, who were scared away from the tract by the bad reputation of its climate, and only occasionally attracted thither by its facilities for sport. In fact, the sum of the whole matter is in my opinion this: that, even long neglect in other quarters can by a change of system be speedily remedied; but that, in the peculiar region of which we are treating, a very brief period of neglect or bad management is sufficient to ruin the country."

Flight of Mohan Singh.

Mohan Singh, as might be expected, signalised his accession by the persecution of all the friends and relations of Sib Deb, and obliged them to abandon Kumaon and fly to the plains. Lakshmipati Joshi, once a deputy of Harak Deb, was murdered at the *deodár* tree near Almora whilst on his way to pay his respects at the palace, and a complete reign of terror ensued. Both the Raja of Doti and the Raja of Garhwál were unwilling to allow this state of things to continue, and entered into correspondence with Harak Deb, who was still in prison, and the discontented generally in Kumaon. Lalat Sáh, who was then Raja of Garhwál, first took the field and advanced by Lohba to Dwára with a considerable force under the command of Prempati Kumariya. Mohan Singh, distrusting his own influence with the troops, sent his brother Lal Singh to meet the Garhwális, and calling Harak Deb before him begged him to go and fight against the ancient enemy of their country and that he should in reward be restored to his offices and lands. Harak Deb gave a seeming acquiescence, but had hardly time to prepare himself when intelligence was received of the utter defeat of the Kumáonis at Bágwáli Pokhar (1779 A.D.) Mohan Singh on

hearing the news resolved on flight and desired Harak Deb to accompany him, but the latter refused and the usurper fled alone by Gangoli and the Káli to Lucknow and thence to Faizullah Khán of Rámpur, where he was eventually joined by Lál Singh and others of his adherents. Lalat Sáh sent for Harak Deb, and owing to his counsels placed a son of his own named Pradhaman on the throne of the Chands under the title of Pradhaman Chand.[1]

Pradhaman, 1779-86 A.D.

Pradhaman Chand appointed Harak Deb, Jayanand and Gadhadhar Joshis to the principal offices and would, doubtless, have made a permanent impression on the country had the people really desired a stable government, bnt they were now too much accustomed to revolutions to believe that any efforts of theirs could establish a firm peace. Lalat Sáh died and was succeeded by his eldest son Jayakrit or Jaikarat Sáh on the throne of Garhwál, and between the two brothers quarrels soon arose. The Garhwál Raja demanded an acknowledgment of his seniority by right of birth, which the Kumaon Raja refused to give, on the ground that Kumaon had never acknowledged the supremacy of Garhwál, and that he was bound to support the dignity of the throne to which he had succeeded. In the meantime, Harak Deb wrote to Faizullah Khán and begged him not to assist Mohan Singh in his designs, and received an assurance that the Patháns would not connive at any attempts on Kumaon. The Nawáb also promised not to afford any aid or countenance, but desired that some means of subsistence should be provided for the exiled family, a request which was at once complied with, but as promptly declined. Mohan Singh, despairing of success, then went on a pilgrimage, and at Allahabad met the leader of a fighting body of religious mendicants known as Nágas, and promised him the plunder of Almora if they assisted in the invasion of Kumaon. The Nága leader consented and with 1,400 men under four Mahants proceeded to the hills. They entered Kumaon by the Kosi, and, under pretence of being pilgrims on their way to Badrináth, got as far as the confluence of the Suwál and the Kosi before their real character was discovered. Harak Deb then

[1] We have three grants made by Pradhaman Chand during his short reign in Kumaon:—One dated in 1781 A.D., in favour of the family of Krishnanand Joshi; another dated in 1782 A.D., in favour of the family of Benirám Upreti, and a third dated in 1784 A.D., in favour of the family of Rewadhar and Bálkishan Joshis.

posted his forces at Charalekh, and sending a present of money to the Nágas asked them to retire, but urged by Mohan Sigh they attacked the Kumáoni forces and were totally defeated, leaving seven hundred of their dead in the ravines of the Kosi.[1]

The Joshiyána raid.

The episode in no wise allayed the jealousy that existed between the two Rajas: and now the elder brother, urged by his advisers, considered that he had claims to the entire sovereignty of the two kingdoms, and even intrigued with the exile, Mohan Singh. Harak Deb saw the evils that would certainly accrue from this estrangement and went with a strong escort towards Garhwál and requested that Jayakrit Sáh would grant him an interview with the object of settling the questions in dispute. The Garhwál Raja declined the interview and would not believe in the sincerity of Harak Deb and, perhaps, he was right, for when he attacked Harak Deb, hoping to surprise him, he found himself opposed to a force which defeated his troops and obliged him to seek safety in flight. So hardly pressed were the Garhwális in the pursuit that the Raja sickened and died;[2] and the Kumáoni troops, plundering and burning every village on their way and even the sacred temple of Dewalgarh, entered and took possession of the capital, Srinagar. To the present day, this raid into Garhwál is known as "the Joshiyána." Parákram Sáh, another brother of Pradhaman, had previously proclaimed himself Raja of Garhwál, and though Pradhaman at first played him off as a possible rival to Jaikarat, he now resolved to enter Garhwál and assume possession of the throne. He at first wished to leave Parákram in Kumaon, but the latter declined, preferring Garhwál, but was easily reduced to obedience, for the whole country was against him,[3] but remained too long away for his interests in Kumaon. Although Harak Deb did everything that man could do to strengthen his position, the natural enemies of his

[1] Hence the proverb:—

Jogi ka bábú ko hatak (fanj kya dhariyo chíyo.

Meaning, what business had the jogi's (mendicant) father in the army? A proverb now often applied to those that meddle in other people's affairs.

[2] Some say that he was assassinated by the express orders of Harak Deb.

[3] The following rhyme was applied to the weak attempts of Parákram Sáh to obtain possession of Garhwál:—

"*Ko láta kátha barta o sun kála tu*
Anala le gar músho daur duna tu."

Meaning, "speak, O dumb one, listen deaf one thou; the blind hath stolen the store, seek the guard you."

race were too powerful for him. From the south came Nandrám, from the eastern districts, Mohan Singh and Lál Singh, and a Garhwáli contingent was added by Parákram Sáh, and all united near the Naithána fort in Patti Dora Talla of Páli where Harak Deb lay awaiting reinforcements. None came, however, and many of his followers deserted him, as they did not care to fight for a Raja who was a Garhwáli in heart and cared more for Srinagar than for Almora. Harak Deb was defeated and fled to the plains and thus ended the Garhwáli domination in 1786 A.D.

Restoration of Mohan Singh, 1786-88, A.D.

Mohan Singh was again supreme[1] at Almora, and being hard pressed for money to pay his levies, plundered the country all round. In Káli Kumaon he is said to have extracted four lakhs of rupees from Márás and Phartiyáls alike. Hence the proverb :—

"*Charo khái gaya chakúra. Jehala pura mush bhaya kúra.*"

"The chakúr eat up the food, but both he and the wagtail were caught in the trap."

Harak Deb applied in vain for assistance from Garhwál and was answered only by empty promises. In fact, it is doubtful whether at this time Pradhaman Sáh held the reins of government in Garhwál, for Mohan Singh is said to have now formed an alliance with Parákram Sáh by which both agreed to rule in their respective kingdoms, of which the boundaries were defined, and that Pradhaman Sáh retired into private life. Relying on his own resources Harak Deb recruited a force in Barhepur in the plains and invaded Kumaon again. He reached Háwalbágh and met the forces of Mohan Singh in battle between Sitoli and Railkot, with the result that the usurper was defeated and taken prisoner with his brother Lál Singh, whilst his eldest son, Bishan Singh, was killed. Lál Singh was released and pardoned, but the conqueror took Mohan Singh to a small dharmsála near the temple of Náráyan Tiwárí below Haridungari, and there slew him in expiation of his numerous crimes. This event occurred in the year 1788 A.D. Mohan Singh's

[1] We have eight grants of land made by Mohan Singh during this period :—

Date, A. D.	*In favour of—*	*Date, A. D.*	*In favour of—*
1786.	Bágeswar temple.	1788.	Bhairab temple in Almora.
1787.	Ditto.	,,	Raghunáth temple in Almora.
1787.	Bhairab temple in Almora.	,,	Badrináth temple.
1788.	Bágeswar temple.	,,	Pabaneswar temple in Sálam.

son, Mahendra Singh, fled to Rámpur and Harak Deb again entered Almora as master. He at once wrote to Pradhaman Chand, inviting him to come to Kumaon and take possession of the vacant throne; but mindful of his sufferings and the uncertain tenure by which he held the country before, the Raja wisely enough refused to comply, and thus Kumaon was for a time without a master.

Sib Singh (Chand), 1788 A.D.

This state of things did not last long, for Harak Deb knew well that though he might rule in the name of some Chand, he could never hope to found a dynasty himself. He, therefore, sent for one Sib Singh, a Ráotela said to be descended from Udyot Chand, and installed him as Raja under the name of Sib Chand. From the accession of Pradhaman Chand up to the conquest by the Gorkhális the entire power of the State was vested in the hands of the Joshis and their adherents and is known amongst the people as "the Joshyál," but this time, however, they had not an opportunity for establishing their government firmly in Almora before Lál Singh with the asistance of Faizullah Khán of Rámpur invaded the hills. A battle was fought at the Dharmsila village near Bhím Tál in which Gadadhar, the Joshi leader, was slain and his forces were routed. They all then fled towards Garhwál for assistance, and Lál Singh, passing through Almora, pursued the retreating Joshis as far as Ulkagarh in Garhwál, where Harak Deb made a successful stand and again assuming the offensive, drove his enemies to Chukám on the Kosi. In this action he was aided by a Garhwáli contingent sent by Pradhaman Sáh. But, on the other hand, a second Garhwáli contingent, sent by the Raja's brother Parákram Sáh, now assisted Lál Singh, who was thus enabled to take the field once more. Harak Deb retired with Sib Singh to Srinagar, where Pradhaman Sáh resided whilst Parákram Sáh, always obstinate, unsteady and unreasonable, supported the pretensions of Lál Singh's party and agreed to place the son of Mohan Singh on the throne of Kumaon in return for a subsidy of one and a half lakh of rupees, thus apparently acting in direct opposition to his brother's policy. It is very difficult indeed to understand Garhwáli politics at this time. We see the brothers Pradhaman and Parákram arrayed as partisans on opposite sides and sometimes living in amity together at Srinagar and sometimes in arms against each other; and

now whilst Pradhaman Sáh gave shelter to the exiled Joshis, Parákram accompanied their enemies to Almora and assisted in the installation of Mahendra Singh, the son of Mohan Singh,[1] as Raja of Kumaon under the title of Mahendra Chand in 1788 A.D.

Mahendra Singh (Chand), 1788-90 A.D.

Lál Singh took the place of Harak Deb and united in his own person all the chief offices of the State. He took an active part in the persecution of the Joshis and drove many of them into exile, others were imprisoned and some of the prominent members were executed for real or fancied offences. Parákram Sáh, too, so used his influence in Garhwál that Harak Deb fled to the plains and sought the protection of Mirza Mehndi Ali Beg, Subahdár of Bareilly, on behalf of the Nawáb, but Lál Singh anticipated the result of the Joshi intrigues in that quarter by presenting himself in person (1789) before the Nawáb of Oudh whilst he was hunting in the jungles at Khera near Haldwáni and claimed the protection of the Oudh darbár for Mahendra Singh, who he said had always been their ally and had willingly acknowledged Oudh as owner of the Tarái. Before, however, proceeding further we must turn to Nepál and briefly trace the rise of the Gorkháli power there.

[1] As so much has been said about this family, we shall now give the genealogical tree. Mr. Batten calls Mohan Singh "the spuriously descended cousin of Dip Chand" and Mr. Fraser in his report to Government in 1814 traces the descent of the family from Pahár Singh, the offspring of Báz Bahádur Chand by a dancing woman: to whose son, Hari Singh, were legal issue Mohan Singh and Lál Singh. Under the quasi caste name of Ráotela are included both the legitimate and illegitimate junior members of the Chand family, and but little distinction was ever made in the hills between the lawful and illegitimate members of a family. Even Harak Deb allowed Mohan Singh to be a descendant "though illegally and basely" of the royal line, and as such it appears to me that he would, according to the hill custom, be considered a Ráotela, or one sprung from the royal stock. Báz Bahádur Chand.

Pahár Singh.

Hari Singh.

Mohan Singh	Lál Singh.
Mahendra Singh.	Gumán Singh.
Partáb Singh.	Shiuráj Singh.
Nanda Singh.	
Bhím Singh.	

The elder branch is represented by the Government pensioner at Almora and the younger branch by Shiuráj Singh now of Káshipur and created a Raja by the British Government. The claims of both were definitely dismissed in Board to Government No. 35, dated May 4th, 1821.

CHAPTER VII.

HISTORY—(*concld.*)

CONTENTS.

The Gorkhális. Ram Bahádur invades Kumaon. Invasion of Garhwál. Chinese attack Nepál. Attempts by the family of Lál Singh to recover Kumaon. Gorkháli administration of Kumaon. Ran Bahádur retires to Benares. Harak Deb. Ran Bahádur returns to Nepál. Garhwál and the Dún under the Gorkhális; their punishment on defeat. Gorkhális in Kumaon, their forces and the administration of justice. Causes of the Nepál war. Aggressions on the Gorakhpur frontier. Fruitless negotiations. Bútwal. Opening operations of the war. Invasion of the Dún. Kalanga. From the fall of Kalanga to the invasion of Kumaon. Mr. Gardner appointed to political charge. Annexation determined on. Preparations for the invasion of Kumaon. Disposition of the forces. Advance on Ránikhet. Gorkhális occupy Kumpur. British occupy Siyáhi Devi. Gorkhális retire to Almora. British occupy Katármal. Captain Hearsey's operations in eastern Kumaon, is defeated at Khilpati and taken prisoner. Action at Gananáth. Capture of Almora. Bam Sáh and the Gorkhális retire to Doti. Mr. Gardner in civil charge with Mr. Traill as assistant. Long negotiations regarding peace with Nepál. At length peace is concluded. Garhwál affairs. British administration under Traill, Batten and Ramsay.

The Gorkhális.

We have now reached the time when the Chand dynasty that had so long ruled in Kumaon was to cease to exist. The blow was as sudden as it was unexpected and was delivered by the Gorkhális who first appear in history towards the middle of the last century. At that time Nepál was broken up into a number of petty states; in the valley and its neighbourhood, were Bhátgáon, Banepa, Lalitpátan and Kántipur or Káthmándu, to the west were the Vaisya Rajas and Dúlu, Doti, Jumla and Achám, and to the east were the petty chiefs of the Kiránti. To the north, the hills were also divided amongst a number of petty Rajas each of whom claimed independence of Nepál and of each other, and amongst them was Narbhupála Sáh, the ruler of the small state of Gorkha, which lay about eight days journey to the north of Nepál. The Gorkháli Raja seeing the defenceless condition of the valley, divided as it was amongst a number of families each of whom was at feud with the other, and anxious to enlarge his narrow dominions which

ill afforded sustenance to its rapidly increasing population, led a force towards Nepál and laid claim to the throne. He was, however, met by the Vaisya Rajas of Noákot and obliged to retire across the Trisúl Ganga[1] to his own country. Finding that his forces were insufficient and his information regarding the resources of the valley chiefs was imperfect, Narbhupála Sáh resolved to await a better opportunity and in the meantime to correct the errors in his calculations which experience had made manifest. For this purpose his son Prithináráyana was sent, when quite a child, to be brought up at the court of Bhátgáon where he managed to acquire that intimate knowledge of the factions and feuds and resources of each country which shortly afterwards served his purpose so well. Prithináráyana succeeded his father in 1742 A.D. and commenced his career of conquest by the annexation of Nuwákot and the hill country to the westward. In addition to great natural abilities and considerable talent as a commander he was also a master of intrigue and by his agents found means to foment disturbances between the independent princes in his neighbourhood and to induce them to apply to him for aid and support. His troops were constantly exercised and the wealth already brought to Gorkha by many of them, attracted to his side the best fighting clans in the hills. When he thought the time was ripe for a decisive blow, he descended with an overwhelming force and took possession of Noákot, Kirtipur, Banepa, and Bhátgáon and in 1768 A.D. occupied Káthmándu which henceforth became his principal residence. The Gorkhális did not gain the country without a long and severe struggle during which strange and fearful cruelties are said to have been perpetrated by the invaders. Prithináráyana Sáh died in 1775 and was succeeded by his son Sinha Partáp Sáh who during his short reign was able to add only the country on the east as far as Sumbheswara to the Gorkháli possessions. Ran Bahádur Sáh succeeded his father in 1778 with the Ráni Indur Lachhmi as regent.[2] She was a woman of a determined character verging on cruelty and under her the work of conquest went rapidly on. Lamjung

[1] Wright, 147.

[2] In 1779 the Ráni Regent was put to death by Bahádur Sáh, uncle of the young king who assumed the reins of government and carried out the aggressive policy of his predecessor. It was he that completed the conquest of Achám, Jumla and Doti whence he expelled the reigning Raja Prithipati Sáh. It was he also who conceived and carried out the invasion of Kumaon.

and Tanhan were the first to fall, then followed the country of the Chaubísi Rájas up to the Káli, including Kashka, Parbat, Prísingh, Satún, Isniya, Maskot, Darkot, Urga, Gutima, Jumla, Raghan, Dárma, Juhár, Pyuthána, Dhani, Jaserkot, Chíli, Golám, Achám, Dhulek, Dúlu and Doti.

Ran Bahádur invades Kumaon.

The Nepálese darbár were well acquainted with the state of affairs in Kumaon and resolving to add it to their conquests, wrote to Harak Deb desiring his assistance and co-operation. There is some reason to believe that this was at least promised, for we find him join the Gorkhális on their entering into Almora and also named as their representative should the Gorkháli troops have been obliged to leave Kumaon to defend their own territory against the Chinese, a matter which will be noticed hereafter. For this conduct there can be no excuse and no matter how much he may have suffered at the hands of the Phartiyáls, the alliance of Harak Deb with the Gorkhális cannot but be looked on as selfish and unpatriotic. The Gorkháli army destined for the invasion of Kumaon set out from Doti early in 1790 under the command of Chauturiya Bahádur Sáh, Kázi Jagjít Pánde, Amar Singh Thápa and Surbír Thápa. One division crossed the Káli into Sor and a second was sent to occupy the patti of Bisung. When news of this invasion arrived at Almora all was confusion and despair. Mahendra Singh summoned the entire fighting population and with part of his regular troops took the field in Gangoli whilst Lál Singh with a like force advanced through Káli Kumaon. Amar Singh marched against the Kumáonis, but was defeated by Mahendra Singh and obliged to retreat towards Káli Kumaon. Here, however, the Gorkhális were successful for at the village of Gatera near Katolgarh, they succeeded in surprising Lál Singh and drove him with the loss of two hundred men towards the plains. Mahendra Singh was on his way to assist his uncle when the news of this disaster reached him and abandoning all hope of saving his capital, fled to Kota where he was soon afterwards joined by Lál Singh from Rudrpur. The Gorkhális finding the way thus opened retraced their steps and after some slight resistance at Háwalbágh, took possession of Almora in the early part (Chait) of the year 1790.

In the following year we find Harak Deb at Almora and great preparations made for the invasion of Garhwál. The Gorkhális, however, never penetrated beyond Langúrgarh which for a whole year defied their efforts to reduce it and in the midst of their arrangements for a more determined attack on the fort, news arrived that the Chinese had invaded the Gorkháli possessions and that all the troops should return to Nepál, giving over to Harak Deb the conquered territory to the west of the Káli. The Gorkháli leaders had, however, so impressed Pradhaman Sáh with a sense of their power that he agreed[1] to pay a yearly tribute of Rs. 25,000 to the Nepálese government and send an agent to the darbár which for the next twelve years preserved some appearance of amity between the two governments. The Gorkháli annals simply state that the Nepálese 'cut the Chinese army into pieces and obtained great glory.' But M. Imbault-huart gives us a very different account of the Chinese invasion of Nepál from official sources.[2] The Panchan Láma of Tashilonpo died in 1781 during a visit to Pekin and his eldest brother Hutu Kotu Tchongpa seized on his treasures and refused to give any to the younger brother Cho-ma-eul-pa, the Schamerpa of Kirkpatrick and Syámarpa Láma of the Nepálese. The latter fled to Nepál and invited the Gorkhális to invade Tibet. They were, however, bought off by a secret treaty by which the Lámas promised them 15,000 taels or £4,800 per annum. Not receiving this, the Gorkhális crossed the frontier and sacked Tashilonpo in 1791. In the following year the Chinese not only expelled the Gorkhális from Tibet but penetrated close to Yang-pu or Káthmándu, where a treaty was signed by which the plunder was restored and recompense was made for the cost of the war. The Chinese troops returned, but left a garrison of 3,000 men in Lhása, and this was the first time that they made a permanent stay in Tibet. From this time, too, the Nepálese have always sent tribute to China. It was owing to this invasion that the Gorkhális were obliged to raise the seige of Langurgarh in Garhwál and return to Almora. They intended to take Harak Deb with them to Nepál as their arrangements

Invasion of Garhwál.

Chinese invasion of Nepál.

[1] As. Res., I, 343 (Hardwicke, 1796): Raper in 1808 says Rs. 9,000 and to keep a vakil of the Gorkhális at his court. As. Res., XI, 500. [2] History of the conquest of Nepál in 1792 translated from the Chinese: J. A. Paris 7th Ser., XII., 343 (1878).

with the Garhwál Raja did not now admit of his succeeding them in Kumaon, but dreading the future in store for him, Harak Deb managed to escape on the way and fled to Juhár. In the meantime news of the peace with China arrived and the Gorkhális returned to Almora, so that Harak Deb was unable to proceed there and stir up his ancient allies in Páli and Bárahmandal. The Juháris who had attached themselves to the Phartiyál faction now seized Harak Deb and kept him a close prisoner, sending information of the event to Lál Singh and Mahendra Singh. The latter sent a relative named Padam Singh, the Márás say, to murder Harak Deb, but as he was not killed, we may venture to hope that it was only to bring him in custody to the plains. The prisoner, however, took means to bring round his jailors to his own side by promising his aid to any attempt that Padam Singh might make to secure the throne of Kumaon for himself; all he cared for was that neither Mahendra Singh nor Lál Singh should ever occupy Almora. The Gorkhális of the Thápa party, too, he now hated as bitterly as the rest and with Padam Singh, as his escort set out for the court of the Garhwál Raja to ascertain what assistance they might expect from him. Pradhuman Sáh declared that he would never again interfere in the affairs of Kumaon and his recent bitter experience of the Gorkhális did not encourage him to embroil himself again with them. Padam Singh returned with his friends to the plains, but Harak Deb remained at Srinagar and long continued to be the animating spirit of the prolonged defence made by that country.

Attempts to recover Almora.

During this time Mahendra Singh had not been idle, he attempted to pass by Bhím Tál to Almora, but was attacked by the garrison of the Barakheri fort and obliged to return to Kilpuri in the Tarái which he had made his head-quarters. A second expedition towards Káli Kumaon was equally unsuccessful for he found himself opposed not only to the Gorkhális but to the great mass of the Márás, who together with Harak Deb had again become fast friends of the intruders. In 1794 A.D. Muhammad Ali Khán of Rámpur was murdered by his brother Ghulám Muhammad Khán, and though the Nawáb was inclined to condone the offence in consideration of a bribe, a British force under General Abercrombie advanced

from Fatehgarh to Bareilly to depose the usurper. There they awaited the arrival of the Oudh Nawáb and Mr. Cherry before commencing hostilities.[1] The Rohillas, however, determined to attack the British before the Nawáb's troops could join them and were completely defeated in a severe action fought at the bridge across the Sanka river near the village of Bithaura.[2] Ghulám Muhammad fled with his forces to Fatehchaur in the low hills below Garhwál, but was eventually obliged to yield himself prisoner and was at once deported to Benares. So soon as the British and Oudh troops left Rámpur, Mahendra Singh began to levy the disbanded followers of Ghulám Muhammad for an attempt on Kumaon, but wearied with these repeated attacks, Amar Singh Thápa marched on Kilpuri and thus deprived the Kumáonis of their only rallying point. Mahendra Singh and his partizans deprived of every acre of land that they could lay claim to fled to the Oudh Subahdar and represented that the tract from which the Gorkhális had ousted them really formed a part of the Tarái which of right belonged to the Nawáb and requested his aid in recovering it from the Gorkhális. Atabeg Khán and Raja Sambhunáth were instructed to take measures to protect the interests of the Oudh darbár and apparently these would have taken the form of a war with Nepál had not the good offices of Mr. Cherry promoted an understanding by which the Gorkhális agreed to yield up all pretensions to the low country and the Nawáb, on the other hand, promised to respect the position of the *de facto* rulers of Kumaon. At the same time provision was made for the retention by the exiled family on some doubtful tenure of a portion of the Tarái for their subsistence and which so far as any *jágír* was concerned was subsequently exchanged by the British for the grant of Chachait in the Pilibhít district.

Gorkhāli administration of Kumaon.

During the years[3] 1791-92 Joga Malla Subah managed the affairs of Kumaon and introduced the first settlement of the land revenue. He imposed a tax of one rupee on every *bísi*[4] of cultivated land and one rupee per head (adult male) of the population besides Re. 1-2-6 per village to meet the expenses of his own office. He was succeeded

[1] Life of Háfiz Rahmat Khán, 135 : Gaz., V. [2] Fatehganj seven miles north-west of Bareilly. [3] These dates are chiefly taken from official proceedings in which the names appear. [4] Nearly a British acre.

in 1793 by Kázi Nar Sáhi and his Deputy Rámadatta Sáhi in charge of the civil administration and Kálu Pánde as commandant. The administration of Nar Sáhi was marked by great cruelties and excesses. Mercenaries from Nagarkot and the western hills had of late years been more extensively employed by both factions in Kumaon and many of them had intermarried with the hill people and formed scattered colonies in Páli, Bárahmandal and Sor. Nar Sáhi doubting their loyalty and determined on their destruction gave orders that an accurate census should be taken of their numbers and the localities in which they resided. He then arranged that on a night agreed on and at a given signal they should be slaughtered without mercy. His instructions were carried out and the people, to the present day, recal the *mangal ki rát* (Tuesday night), or the '*Nar Sáhi ká pálá*', when they wish to express their horror of any villainy or treachery. Nar Sáhi was recalled and was succeeded by Ajab Singh Khawás Thápa and his deputy Sreshta Thápa with Jaswant Bhandári as commandant. Events now occurred at Kathmándu which had some considerable influence over Kumaon affairs. Bahádur Sáh, who had succeeded in holding office since 1779, was deposed by his subordinate Prabal Rána in 1795 and died miserably in prison. Two factions had now arisen in the state and for a long time their quarrels and jealousies retarded all active union for aggressive purposes. The one was known as the Chauntara[1] or Chautariya party, from the titles of their principal leaders who were either sons or nephews of the royal house, and the other the Thápa party sprung from the commonalty of the Gorkháli state and raised to power by its military successes,

[1] A writer in the *Calcutta Review* (Jan., 1877, p. 141) gives two derivations for this word. The one is from *Chautara* or *Chabutra*, a platform of masonry, by which the houses of the chiefs of the Gorkhális were distinguished from those of their clansmen. "Hence the chief became styled amongst his people the Chautara sáhib or master of the platform. In time the eldest son of the chief was called Sáhib Ji and the younger ones Chautara Sáhibs, and thence the corruption Chauntara or Chautariya. The other explanation is that the word is derived from *chau* (=four) and *tri* to cross over the ocean. In the *Rájnîti*, there are four things essential to the man who is entrusted with the management of state affairs; to wit, conciliation, presents, chastisement and the power of causing misunderstanding amongst the members of the enemy's party. The eldest son, who inherited the throne, was not to trouble himself with any affair of state and hence the management devolved on his younger brothers, who acted as ministers. With such duties a knowledge of politics was incumbent on them, and hence they were called Chauntariyas, that is those who have crossed the four oceans of the essentials named above." We have seen the name applied to the earlier advisers of Som Chand, and in Kumaon the term is interpreted as meaning those who transacted the affairs of the four quarters, that is all duties.

which, in the first instance, were entirely due to them. At this time, the Chauntara party was still in power, but met its first reverse in the disgrace and death of Bahádur Sáh. As a consequence of this change of parties we find Amar Singh with his deputy Gobind Upádhya in charge of the civil administration and Bhakti Thápa commandant of Kumaon in 1795. The former gave place to Prabal Rána and his deputy Jaikrishna Thápa in the following year. In 1797 the intrigues at court brought the Chauntara party once more into temporary power and Bam Sáh with his brother Rudrbír Sáh as deputy supplanted the Thápa faction in the civil administration at Almora. Their short tenure of office is said to have been signalised by the imposition of a new tax of five rupees per *jhúlu*[1] of cultivated land held by Brahmans which had hitherto been exempt from the payment of revenue, but as this tax was very seldom collected, it may be held to have been merely a measure intended to keep the more refractory and intriguing members of that caste in order. So long as they gave no trouble to the authorities it was not levied, but if the Brahman landholders were suspected of paying more attention to political affairs than to the cultivation of their holdings, the tax with arrears was at once demanded. Ajab Singh and Sreshta Thápa, who had previously held office in 1794, relieved Bam Sáh and his brother, but were themselves succeeded in a few months by Dhaukal Singh Bashnyát and his deputy Major Ganapati Upádhya. Dhaukal Singh was a man of violent temper and possessed of little tact in the management of his troops, so that in a dispute which he had with them regarding their pay he attempted to cut down one of his men, but was himself killed in the fray.

Ran Bahádur goes to Benares.

In 1800, Ran Bahádur, in a feeble way, attempted to assert his position as head of the state and wished to dismiss his Thápa ministers, but they uniting with the Máhila (second) Ráni compelled the Rája to abdicate in favour of his son, who was raised to the throne under the name Girbán-juddha Vikram Sáh with the Ráni as nominal regent. Ran Bahádur assumed the garb of a mendicant and the name of Nirgunánanda Swámi and went to live in Devapátan, and then in Lalitpur, where he so conducted himself as to give offence to the

[1] From six to thirteen acres according to the custom of the place.

religious feelings of the entire people. It is said that when one of his women was ill and notwithstanding a liberal expenditure on offerings to the deity, Taleju,[1] the favorite, did not improve, Ran Bahádur directed that the image should be defiled and broken and the physicians who attended the lady should be executed. Owing to similar excesses he was at length forced to retire to Benares, where he received protection and assistance at the hands of the English Resident. In 1802, Rudrbír Sáh succeeded Dhaukal Singh in Kumaon for a few months, and in 1803 Káji Gajkesar Pánde with his deputy Krishnanand Subahdár assumed charge of the civil administration.

Conquest of Garhwál.

The year 1803 is remarkable for the great and successful effort made by the Thápa party to reduce Garhwál. Ever since the siege of Langúrgarh was raised in 1792, small parties of Gorkhális had periodically plundered the border parganahs, which they were taught to look upon as their lawful prey. The prisoners made in these expeditions were sold into slavery, the villages were burned and the country made desolate. Still the Garhwális did not always allow these raids to pass unpunished. Reprisals were made and a border warfare ensued, characterised as all such wars are by deeds of wanton cruelty and blood-thirsty revenge. Several fresh attempts had been made to capture Langúrgarh, but all had proved fruitless, and now the Gorkháli leaders, Amar Singh Thápa, Hastidal Chautariya, Bam Sáh Chautariya, and others, at the head of a numerous and well-equipped veteran army invaded Garhwál. In Hardwicke's narrative[2] we have a description of Pradhuman Sáh and his brothers in 1796, which we may make use of here. The Raja appeared then "to be about twenty-seven years of age, in stature something under the middle size, of slender make, regular features, but effeminate." His brother Parákram Sah was a stouter and more manly person, and Prítam Sáh, then about nineteen years of age, is described as bearing a strong likeness to the Raja in make, features and voice. All wore plain muslin *jámahs* with coloured turbans and waist-bands, without jewels or other decorations. Pradhuman Sáh's appearance did not belie his character; mild and effeminate to a degree he did not grasp the nature of

[1] Wright, 262. [2] As. Res., I., 334.

the danger to which he was exposed and portents had already paralysed his superstitious mind and warned him that his hour had come. The priests of Paliyagadh at the sacred sources of the Jumna had foretold[1] the Gorkháli conquest and the death of Pradhuman Sáh at Dehra, and his capital itself had been visited by an earthquake,[2] which rendered his palace uninhabitable; frequent shocks took place for several months, and it is said that many ancient streams ran dry, whilst new springs appeared in other places. No real resistance was offered and the Raja and his family fled by Bárahát to the Dún closely pursued by the victorious Gorkhális who occupied Gurudwára or Dehra in the cold-weather (October, of 1803.[3]) Pradhuman Sáh then took refuge in the plains and through the good offices of the Gujar Raja Ramdayál Singh of Landhaura was enabled to collect a force of some twelve thousand men, with whom he entered the Dún, resolved to make one attempt to recover his kingdom. In this he was unsuccessful, and in an action fought at Khúrbura near Dehra perished with most of his Garhwáli retainers (January, 1804). Prítam Sáh, the brother of Pradhuman Sáh, was taken prisoner and sent in custody to Nepál, but Sudarshan or Sukhdarshan Sáh, the eldest son of the deceased Raja, escaped to British territory, and Parákram Sáh, who had so long been a trouble to his brother, took refuge with Sonsár Chand in Kangra. Amar Singh, with his son Ranjor Thápa as deputy, held the administration of both Kumaon and the newly-annexed territory in their own hands during 1804, whilst preparations were being made to extend the Gorkháli conquests westward. In 1805, we find Rítudhvaja Thápa, Bijai Singh Sáhi and Hardatta Singh Ojha in Kumaon engaged in a revision of the settlement of the land-revenue, but in the following year Rítudhvaj was recalled and for some crime was executed in Doti. He was replaced by Chautariya Bam Sáh, who retained the administration of the affairs of Kumaon in his own hands until the British conquest in 1815. This change from the Thápa to the Chauntara faction was again due to the intrigues at Kathmándu.

Harak Deb.

We must now return to Harak Deb, who was left in Garhwál after his unsuccessful application to Pradhuman Sáh for aid against Kumaon. He

[1] Himája Mountain, 409. [2] The date given is Bhádon Anant 14th, San 1860. [3] It is not a little remarkable that the Gorkhális entered the Dún as conquerors in the same month that the British first occupied Saháranpur. See Gazetteer, II., 252.

seems to have held some office there, for in 1794 we find his name connected with an application made to the Garhwál darbár to expel the adherents of the Rohilla Ghulám Muhammad, who had taken refuge in the Pátli Dún. Harak Deb was much disappointed at the arrangements made by the Oudh darbár with the Gorkhális relative to Kumaon affairs and went in person to plead the cause of the oppressed Garhwális before the Nawáb. Asaph-ud-daula referred him to Mr. Cherry, who had then gone as Resident to Benares, saying that as it wast hrough the advice and intervention of his friend Mr. Cherry that the agreement with the Gorkhális had been concluded, no alteration could be effected without his consent. In 1797, Harak Deb, then fifty years of age, presented himself as a vakíl on the part of the Garhwál Raja at Benares, before the British Resident, and some correspondence actually took place with Mr. Graham relative to the Gorkháli position and the real or fancied wrongs of their subjects in the hills, which was only interrupted by the murder of Mr. Cherry in 1799. Harak Deb then went to the Court of Sonsár Chand of Kangra in quest of aid and applied to the Sikh ruler and also to Lord Lake, but obtained nothing more than sympathy. About this time Ran Bahádur came to Benares, and hearing of Harak Deb and his well-known hostility to the Thápa faction sent a messenger to him at Kankhal and invited him to visit Benares. The result of the interview was that Harak Deb offered to espouse the cause of the Raja and aid him in any attempt that he chose to make on Nepál, and as a preliminary movement despatched his son Jainárayan to make his way with a small force through Garhwál and Juhár to Jumla, where they knew that there were many adherents of the Raja's party. Jainárayan got as far as Lilam in Juhár, where he was detained quite as much by the disaffection and indeed exhaustion of his own people as by the active opposition of the Juháris, who had broken down a bridge to stop his way. In the meantime the Juháris amused the Garhwális with promises of aid, whilst in reality fleet messengers conveyed information of their presence and condition to the nearest Gorkháli post, the result being that Jainárayan and his party were captured and the former was sent prisoner to Nepál, where he remained until the British conquest. This untoward result was soon followed by the death of Pradhumán Sáh, and

in disgust Harak Deb retired again to Kankhal, vowing never to take any active part in politics again. But here he was in the centre of the Nepálese traffic in Garhwáli slaves and was the only one that the poor and oppressed could now look up to for any alleviation of their miseries. Accordingly we find numerous letters of his to Mr. Fraser, our Resident at Dehli, complaining of the atrocities committed by the Gorkhális on the hill people, whilst his connections with Nepál still enabled him to be of use to Ran Bahádur, with whom also he held frequent communications.

Ran Bahádur returns to Nepál.

When Ran Bahádur left Nepál, the reins of office were held by Damodar Pánde and Kirtimán Sinha Bashnyát, but gradually Sher Bahádur Sáh, said by some to be the son of Partáb Sinha by a Newari woman, became the head of one faction and Bhímasena Thápa the head of another, as well as secret and confidential adviser of the exiled Raja. Neither trusted the other and at length the Thápa chief resolved on sending for the old Raja and caused intimation of certain circumstances favourable to him to be conveyed to him at Benares. Ran Bahádur at once applied for and received the arrears of pension that was allowed to him through the British Government by his own. He then set out for Kathmándu and arrived there before it was known that he had even left Benares. The troops sent to stop his progress fraternised with his retinue and almost without a blow being struck, the Raja was restored. For a time the Chauntara party flourished and, as we have seen, Bam Sáh became civil governor of Kumaon. Unfortunately, however, Ran Bahádur's disposition had not been improved by exile. He commenced a series of persecutions and confiscations which had the effect of reuniting the Thápa party and giving them as allies even many who were otherwise opposed to them. On one occasion he dropped a piece of paper[1] on which were written the names of many who were intended for destruction: this paper was picked up by Sher Bahádur Sáh, who, seeing his own name amongst the proscribed, assassinated Ran Bahádur in 1807. For a time all was confusion. Bhímasena Thápa was at the head of the government, and Thápás and Chauntaras fell to blows.

[1] Fraser's Himála Mountain, 6: Mr. J. B. Fraser was brother of the Dehli Resident and accompanied him in a tour through the conquered territories in 1815, so that he had exceptional sources of information.

Balrám Sáh slew Sher Bahádur, and in the end the Thápa party replaced Girbán-Juddha on the throne with Bhímasena as his principal adviser. Amar Singh Thápa was appointed generalissimo of all the Nepálese forces to the westwards, and Káji Amar Singh, the father of Bhímasena, held command in Nepál. Of all the Chauntara party only Bam Sáh, Hastidal Sáh, Rudrbír Sáh, Dalbhanjan Pánde, and a few others retained any offices and these were in the shape of some unimportant commands and pensions. The Thargars and Barádars of the party in disgrace were, as might be expected, dissatisfied with the existing state of affairs and constantly watched for an opportunity for overthrowing the Thápas and getting the reins of government again into their own hands. The knowledge of this disposition was not forgotten later on when the British were obliged to pay attention to Nepálese affairs and doubtless contributed, in some measure, to decide our Government to interfere when they did.

Garhwál under the Gorkhális.

From the subscriptions to documents confirming the grants of lands free of revenue to the Garhwál temples we gather that Hastidal Sáh (with some interruptions) and Sardár Bhakti Thápa were connected with its government from 1803 to 1815. But in addition we find the following names occur:—

1804. Káji Ranadhír Sinha, Káji Amar Sinha Thápa, Ranajít Sinha Kunwar, Angad Sardár and Sardár Parsurám Thápa.

1805. Chandrabír Kunwar, Vijayanand Upádhya, Gaje Sinha.

1806. Ashtadal Thápa, Rudrbír Sáh, Káji Ranadhír, Parsurám Thápa.

1807-9. Channu Bhandári, Parsurám Thápa, Bhairon Thápa.

1810. Káji Bahádur Bhandári, Bakshi Dasarath Khatri and Subahdár Sinhbír Adhikári.

1811-15. Amar Sinha Thápa and Pharmarám Faujdár.

We are unable to say what was the position in the administration held by these officers individually, but we know that until 1805-6, at least, Hastidal had little or no influence in the government. After a time, Mahant Harsewak Rám was reinstated[1] in the Dún and some

[1] As. Res., XI., 464.

improvement took place, which was farther increased when Hastidal was recalled from Kángra and took an active part in the management of affairs. Mr. Williams tells us that :—"Raids from Saháranpur and the Panjáb had been brought to an abrupt termination by the fulfilment of a threat to burn one village for every plundering party that entered the Dún. A band of Sikhs once had the temerity to set the new government at defiance and, as in the days of yore, sacked a village, carrying away several women and driving off the cattle. The Nepálese commandant, receiving intelligence of the outrage, sent two hundred men in pursuit of the marauders whose own dwellings were surrounded and set on fire. Every man, woman or child attemping to escape was massacred in cold blood, except a few of the handsomest females, whose beauty purchased their life. This signal example had the desired effect." From Raper's account of his journey to survey the Ganges, in 1808, we gather a few more particulars. He met Hastidal Sáh at Hardwár and describes him as a man of about forty-five years of age, of middle stature, pleasing countenance and desirous in every way to aid him. A few days afterwards Raper was introduced to Hastidal's successor, Bhairon Thápa, who is described as the very reverse of friendly and only anxious to impede his progress, though eventually they parted good friends. Raper also notices the excessive rigour of the Gorkháli rule in Garhwál and writes[1] :—"At the foot of the pass leading to Har-ka-pairi is a Gorkháli post, to which slaves are brought down from the hills and exposed for sale. Many hundreds of these poor wretches, of both sexes, from three to thirty years of age, are annually disposed of in the way of traffic. These slaves are brought down from all parts of the interior of the hills and sold at Hardwár at from ten to one hundred and fifty rupees each." Mr. J. B. Fraser computed the number sold during the Gorkháli occupation at 200,000, but we may hope that this is an exaggeration. Where delinquents were unable to pay the fine imposed, the amount of which, be it remembered, rested entirely at the arbitrary discretion of the Gorkháli officer in charge of the district, he was sold into slavery together with his family. Parents driven to desperation sold their children and, under certain circumstances, uncles sold their nephews or nieces and elder brothers, their younger

[1] *Ibid.* At this time a camel cost Rs. 75 and a horse Rs. 250 to Rs. 300.

brothers and sisters. Bhairon Thápa was sent to the siege of Kangra and was succeeded at Srinagar by his son Sreshta Thápa, who had formerly held office in Kumaon. Hastidal seems to have fallen into disgrace because his brother Rudrabír Sáh executed a treaty with Sonsár Chand of Kangra which was displeasing to the Thápa faction.

State of Garhwál at the conquest in 1815

For an account of Garhwál immediately after the British conquest when it had been for some twelve years under Gorkháli governors we have some information in the journals of Mr. J. B. Fraser and others. Raper, writing in 1814, says:—"The people are most vehement in their complaints against the Gorkhális, of whom they stand in the utmost dread, but from the slavish habits and ideas they have contracted, it is doubtful if a spirit of resistance or independence could be excited amongst them. The villages in Garhwál afford a striking proof of the destruction caused by the Gorkhális: uncultivated fields, ruined and deserted huts, present themselves in every direction. The temple lands alone are well tilled." Mr. Fraser[1] writes of the Dún that under the Garhwáli Rajas it yielded to Government a revenue of a lakh of rupees a year; but the Gorkhális "having much ruined it, never realised[2] more than Rs. 20,000 per annum." On his march thence to the sources of the Ganges, the general appearance of the country was that of one that had been subject to all the horrors of war. Deserted and ruined villages lined the road and frequent patches of terrace cultivation now becoming overgrown with jungle alone showed where hamlets had once stood. He again writes:—

"The Gorkhális ruled Garhwál with a rod of iron and the country fell in every way into a lamentable decay. Its villages became deserted, its agriculture ruined and its population decreased beyond computation. It is said that two lakhs (200,000) of people were sold as slaves, while few families of consequence remained in the country; but, to avoid the severity of the tyranny, they either went into banishment or were cut off or forcibly driven away by their tyrants, yet some of the individual rulers of these conquerors were mild and not disliked. Bam Sáh and Hastidal, the governors of Garhwál, were disposed to indulgence; and in some situations the country towards the close of the Gorkháli rule was again improving and getting reconciled to its new state. Ranjor Singh Thápa was also a well-disposed man and a mild governor, and

[1] Himála Mountains, 384, &c.

[2] Raper puts the Gorkháli revenue in 1808 at Rs. 35,000: As Res., XI., 466.

inclined to justice, but the executive officers were severe. Their manners as conquerors were rough, and they despised the people they had conquered, so that at some distance from the seat of government exactions went on, insults and scenes of rapine were continually acted, and the hatred of the people to their tyrants was fixed and exasperated: the country was subdued and crushed, not reconciled or accustomed to the yoke; and, though the spirit of liberty was sorely broke, and desire for revenge was checked by the danger of avowing such sentiments, a deliverance from the state of misery groaned under was ardently, though hopelessly, wished for."

But a day of reckoning arrived for the oppressors and the following extract would excite our pity for the Gorkhális did we not know that it was but the natural outburst of a savage and oppressed people and a punishment well earned by deeds of rapine and cruelty. Mr. Fraser writes:—"It was usual during the time when the Gorkhális were in power to station parties in the different districts for the purpose of collecting the revenue, and in progress of time many of them took daughters of the zamíndárs in marriage; not always with the good will of the latter, but the connection formed a tie between the conquerors and the conquered, which though far weaker, from the savage and treacherous nature of the people, and circumstances of violence under which it was formed, than a similar one in most other countries would have been, was still sufficient, during its existence, to guarantee the life and prevent the murder of the son-in-law. When the power of the Gorkhális was broken and their troops taken prisoners or scattered, those in the remoter districts, who were thus connected, choose to domesticate with their wives and families rather than run the hazard of retreating through a country of hostile savages, ripe for revenge upon tyrannical but now foreign masters, others too in like manner, although not enjoying the security resulting from any such tie, choose rather to trust to the protection of some zamíndárs whom they had known, and had possibly once obliged, and by whom they believed that their lives would not be attacked, than risk their safety in a more dangerous flight, although the loss of property in both cases was nearly certain. Thus individuals of this wretched people were found in the hills in every district, and almost every one was stripped of his property even till they were in want of clothes to cover them from the weather. Many were more deplorably situated. Some wounded and neglected

Condition of the Gorkhális after their defeat.

were found languishing unassisted and wanting even necessaries. Others had fled to the jungles to escape the massacre to which their comrades had fallen victims and for a long time subsisted on the roots and fruits found in thick forests. Even the marriage tie did not always ensure good treatment, and not unfrequently when the terrors of consequences ceased, the zamíndárs reclaimed their daughters and forced them to leave their husbands, although the stipulated prices had been paid for them."

Gorkhális in Kumaon.

The character of the fiscal arrangements of the Gorkhális in Kumaon will be noticed elsewhere. Though but little opposition had been shown by the people in general to their new masters, they were none the less harassed, taxed and oppressed by them. We can easily understand the reasons for this apathy on the part of the Kumáonis if we consider the losses caused by the continued struggle for power between the Joshis and the adherents of Mohan Singh, for which the peasantry could obtain no redress. It mattered little to the working population which of the two parties succeeded to the supreme power, provided they could make their rule respected. This constant change of masters and the irregular demands which were found necessary to recruit an empty exchequer tended to weaken the tie of loyalty to those nominally possessed of the reins of government. Many stories are told of the cruelties perpetrated by the Gorkhális during the earlier years of their rule in Kumaon, but a few will suffice. On one occasion a new tax was imposed to which there was no response, and in order to make an example the headmen of fifteen hundred villages were sent for under pretence of explaining to them the object of the tax. The men came, but were all slaughtered in cold blood as a warning to the rest, and there were, therefore, few arrears in those days. Many of the better classes fled to the plains and the families of defaulters were sold into slavery in Rohilkhand. Though, during the last seven years of the Gorkhális' rule, the condition of the people was ameliorated and a better administration put an end to many of the most glaring abuses, the reputation they earned for themselves in Kumaon will not for many generations be forgotten. Their tyranny has passed into a proverb, and at the present time when a native of these hills wishes to protest in the strongest

language in his power against some oppression to which he has been subjected, he exclaims that for him the Company's rule has ceased and that of the Gorkhális has been restored.

Bam Sáh in Kumaon.

From the year 1806, when Bam Sáh[1] became civil governor of the province, matters changed very much for the better. He began at once to adopt measures to secure a better administration. He gained over a number of the principal Brahmans and other leading men by promises or by bribes, and was thus able to frustrate the weak attempts of disturbers from the outside. Garhwál was at this time governed as if its rulers' sole object was to turn it again into a jungle, but Kumaon appears to have been favored in every way. The property of private individuals was respected, the grants of land made by previous rulers were confirmed to the actual possessors, the revenue was collected in the usual manner, a rude attempt to administer justice was made, and most prized of all it was forbidden to sell the persons of revenue-defaulters and their families into slavery. A great number of Kumáonis were taken into the Gorkháli service and a large proportion of the levies sent to the west were raised in Kumaon, so that in 1814 quite two-thirds of the Nepálese forces were composed of men from the upper parganahs of Kumaon or Garhwál. These levies were not however incorporated with the regular troops, but were rather considered in the light of a local militia and received regular pay only when on foreign service. When disbanded or on return from foreign service, they had a small subsistence allowance granted to them, generally by an assignment of land, and which was considered in the light of a retaining fee. They were as a rule under the orders of Gorkháli officers, though Kumáonis occasionally were intrusted with small commands. The levies were armed much in the same way as the regular troops, but were inferior to the Gorkhális in strength, activity and gallantry, though capable of doing excellent service under good leaders. In Kumaon, the army was distributed throughout the province and each district was obliged to provide pay for a certain number of men. This unsatisfactory arrangement led to numerous complaints, and moved by these

[1] Raper calls him Bhím Sáh and describes him in 1808 as a tall, stout, good-looking man, about sixty years of age, with a slight impediment in his speech.

the Nepál darbár sent a commission, at the head of which was Rewant Káji, in 1807-8, to inquire into the system and redress grievances. But with the country parcelled out amongst a number of military officers whose object it was to extract as much as possible in the shortest time from their fiefs, the good done by the commission only lasted so long as they were present. Accordingly we find that in 1809 Bam Sáh himself had to revise the entire arrangements and draw up a regular settlement and record which remained in force until the conquest. The principal officers were changed every year; during their tenure of office they were called *jágíriya* and on retirement *dhakuriya;* their salary (*bálí*) was, like that of their men, obtained by assignments on some village.

The Gorkháli army.

Captain Hearsey in a letter to Government in 1815 describes the Gorkháli commanders as "ignorant, subtle, treacherous, faithless and avaricious to an extreme; after conquest and victory, blood-thirsty and relentless; after defeat, mean and abject; no reliance can be placed on any of their terms or treaties, and hitherto they have kept up a threatening countenance towards the Chinese Government, pretending to be a part of our Government, dressing their troops in red uniforms, arming them with muskets and apeing the names of our subordinate officers. To our Government they have acted with great reserve, imitating the Chinese address and forms and wishing to inculcate in our minds that they were tributary to the Chinese. Their soldiers are badly armed and can bear no comparison to Scindia and Holkar's troops." The injustice of these remarks was sufficiently shown at Malaun, Kalanga, Jaithak and Almora. It is true that the Nepálese affected the European style of exercise, dress and arms, and even the denomination of rank given to their officers was English, for we have on the grants made by them, the titles, colonels, majors and captains, as well as subahdars, faujdárs, sardárs and kájis, but this can hardly have been done for the purpose of deceiving the Chinese. The pay of the regular troops was eight rupees a month whilst on active service and only six rupees at other times.

The men were armed with the *talwar* or sword, *kúkri* or curved knife and match-locks, and the officers carried the sword and shield,

kúkri and bow and arrows, in the use of which they were very dexterous. "The sword was sometimes of the peculiar shape known as *kora* or *bujáli*, the edge having a curve inward like a reaping hook, but far more straight and very heavy, particularly at the point end, where it is very broad and ends abruptly square." *Jinjáls* or wall-pieces were in use to defend the stockades and they had a few small guns. Mr. Fraser's estimate[1] of the Nepálese as men and soldiers may be added here as a set-off against the descriptions of Raper and Hearsey:—"The regular army of Nepál has been for so long a time accustomed to active service, to a series of constant warfare and victory, that the men have become really veteran soldiers, under the advantages of necessary control and a certain degree of discipline: and from their continual success they have attained a sense of their own value—a fearlessness of danger and a contempt of any foe opposed to them. They have much of the true and high spirit of a soldier—that setting of life at nought in comparison with the performance of duty and that high sense of honor which forms his most attractive ornament and raises his character to the highest. They are also cheerful, patient of fatigue, industrious at any labor to which they are put, very tractable and quiet, and from what has fallen under my own observation and knowledge, not, I think, wanton or cruel. This, however, is a somewhat dubious part of their character: in various situations they have behaved in different ways, and have given reason to presume that their natural description, whatever it may be, is swayed by situations and circumstances: even as a nation their character seems various and unsettled. The individuals must exhibit a greater variety still." At the same time we must not forget the many acts of cruelty committed by them and their tyrannical treatment of the unfortunate Garhwális.

The administration of justice was on no regular system, each of the officers exercising jurisdiction according to his position and the number of men at his disposal to ensure his orders being obeyed.

Administration of justice.

Throughout Kumaon and Garhwál all civil and petty criminal cases were disposed of by the commandant of the troops to which the tract was assigned, while cases of importance were disposed of by the civil governor of

[1] Himála Mount., 10.

the province assisted by the military chiefs who happened to be present at his head-quarters.[1] But the commandants were frequently absent on active duty and delegated their powers to Becháris, as their deputies were styled, who either farmed the dues on law proceedings at a specific sum or remained accountable for the full receipts.[2] Their method of procedure was that common to their predecessors and most Hindu states and was simple in the extreme. A brief oral examination of the parties was conducted in presence of the court, and in case of doubt the section of the Mahábhárata known as the Harivansa was placed on the head of the witness, who was then required to speak the truth. Where the evidence of eye-witnesses was not procurable or the testimony was conflicting as in the case of boundary disputes, recourse was had to ordeal. Three forms of ordeal were in common use: (*a*) the *gola-dip*, in which a bar of red-hot iron was carried in the hands for a certain distance: (*b*) the *karai-dip*, in which the hands was plunged into burning oil, and like the former the evidence of innocence was that no harm resulted; and (*c*) the *tarázu-ka-dip*, in which the person undergoing the ordeal was weighed against a number of stones which were carefully sealed and deposited in some secure place and again weighed the next morning, and if the person undergoing this ordeal proved heavier than on the preceding evening, his innocence was considered established. Even the mahant of the sacred temple of Rám Rái at Dehra had to submit to the *karai-dip* ordeal when charged with murder, and being severely burned was obliged to pay a heavy fine. The judgment was recorded on the spot and witnessed by the by-standers and then handed over to the successful party, whilst the other was mulcted in a heavy fine proportioned more to his means than the importance of the case. Panchâyats or councils of arbitrators were frequently had recourse to, especially in cases of disputed inheritance and commercial dealings, and these, too, were frequently disposed of by lot. The names of the parties were written on slips of paper of equal size, shape and material, and were then laid before an idol in a temple; the priest then went in and took up one of the papers, and the name recorded therein was declared successful. Many matters were simply decided in a somewhat similar way by

[1] Traill in Kumaon Memoir, 27.

[2] Garhwál was divided into three commands, As. Res., XI., 499.

the claimant proceeding to some well-known temple and there swearing by the idol that his statement was the true one. To the present day several temples are celebrated in this respect.

The following forms of ordeal are also noted by Traill:—"The *tír-ka-dip*, in which the person remained with his head submerged in water while another ran the distance of a bow shot and back, was sometimes resorted to. The Gorkhálí governors introduced another mode of trial by water, in which two boys, both unable to swim, were thrown into a pond of water and the longest liver gained the cause. Formerly poison was in very particular causes resorted to as the criterion of innocence; a given dose of a particular root was administered, and the party, if he survived, was absolved. A further mode of appeal to the interposition of the deity was placing the sum of money, or a bit of earth from the land in dispute, in a temple before the idol; one of the parties volunteering such test, then with imprecations on himself if false, took up the article in question. Supposing no death to occur within six months in his immediate family, he gained his cause; on the contrary he was cast in the event of being visited with any great calamity, or if afflicted with severe sickness during that period."

Punishment.

Treason alone as a rule was punished by death. Murder if committed by a Brahman brought a sentence of banishment and all other crimes were visited by fines and confiscation. The wilful destruction of a cow, however, or the infringement of caste by a Dom, such as touching the pipe (*hukka*) of a Brahman or Rajpút, were also punishable with death. Under the previous governments death was inflicted by hanging or beheading, but the Gorkhális introduced impaling and sometimes put their convicts to death with the most cruel tortures. Under the Chands, executions were rare and confined almost exclusively to Doms, but under the Gorkhális they became numerous and common. Traill writes:—

"In petty thefts, restitution and fine were commonly the only penalties inflicted; in those of magnitude, the offender was sometimes subjected to the loss of a hand or of his nose. Crimes of the latter description have ever, in these hills, been extremely rare, and did not call for any severe enactment. Acts of omission or commission, involving temporary deprivation of caste, as also cases of criminal intercourse between parties connected within the degrees of affinity,

prescribed by the Hindu law, offered legitimate objects of fine. Adultery among the lower classes was punished in the same manner. Where, however, the husband was of rank or caste, the adulterer was commonly put to death and the adulteress deprived of her nose. The revenge of the injury was on these occasions left to the husband, who by the customs of the country, and by the existing principles of honor was authorized and required to wash off the stain on his name by the blood of the offending parties, and no lapse of time from the commission or discovery of the crime proved a bar to the exaction of this revenge. Convicts were occasionally condemned to labor on the private lands of the Raja, to whom they from that period became hereditary slaves. Criminals also settling at a royal village in the Tarái called Garhgáon received a free pardon, whatever might have been their offence. In cases of self-destruction, the nearest relations of the suicide were invariably subjected to a heavy fine. The most oppressive branch of the police, and that which proved the most fruitful source of judicial revenue, consisted in the prohibitions issued under the Gorkháli government against numerous acts, the greater part of which were in themselves perfectly unobjectionable. The infringement of these orders was invariably visited with fines; indeed they would appear to have been chiefly issued with such view, as among the many ordinances of this kind it may be sufficient to specify one which in Garhwál forbade any woman from ascending on the top of a house. This prohibition, though apparently ridiculous, was in fact a very serious grievance: a part of the domestic economy hitherto left to the women, such as drying grain, clothes, &c., is performed there, and firewood and provision for immediate consumption are stored in the same place, and the necessity for men superintending these operations, by withdrawing them from their labor in the fields, was felt as a hardship."

Causes of the Nepál war.

We have now to turn our attention to other parts of upper India to trace the circumstances under which the British power was established in these hills.[1] For several years before the commencement of the Nepálese war in 1814, the Gorkhális had been making a series of petty encroachments on the British territories at the foot of the Himálaya. Most of these aggressions were entirely without excuse, but as they produced no worse results than occasional feeble remonstrances on our part, the Gorkhális persevered in the same

[1] The best account published of the war with Nepál is that by Mr. H. T. Prinsep in his "History of the Political and Military Transactions in India during the administration of the Marquess of Hastings, 1813-23." Whilst acknowledging its value we must mention that Prinsep's work is based on the official correspondence of the time, and that as the following sketch is drawn from the same sources, occasional coincidence of expression and treatment will be observed which are not to be attributed to plagiarism. The greater part, though not the whole, of the documents relating to the war which are now in the Kumaon Commissioner's office, and which have all been carefully examined and collated, will be found in the "Papers regarding the administration of the Marquess of Hastings in India," printed by order of the Court of Proprietors in 1824. My obligations are also due to the private correspondence of Colonel Gardner during the Kumaon war, which has been placed at my disposal.

system on every favourable opportunity. The most important of these encroachments and the immediate cause of the rupture with the Nepálese Government took place in the Bútwal parganah in the Gorakhpur district. The Gorkhális in 1804, on the pretence that this parganah had formerly belonged to the Raja of Pálpa, whose territories in the hills they had seized, took possession of Bútwal, which was then under direct British management. Beyond weak remonstrances and still worse demands, the enforcement of which was forgotten or avoided, no notice was taken of this aggression until 1812, when the further encroachments of the Gorkhális in the same quarter had become so flagrant that the serious attention of our Government was at last drawn to them. The Gorkhális naturally attributed the indifference which we had hitherto shown to fear, or at least to a disinclination to enter into a contest with them, and consequently refused to surrender any of their acquisitions. The usual negotiations ensued which resulted in nothing that could be held in the slightest degree satisfactory, and in April, 1814, the Governor-General, Lord Hastings, ordered the occupation of the disputed districts, which was effected without any opposition.

Aggressions in Gorakhpur.

The subsequent proceedings of the Nepálese and the conduct of their agents which were held sufficient to justify the declaration of war are described at some length in the proclamation issued on the 1st November, 1814; we shall, therefore, quote from it those parts which more nearly concern the acts of the Nepálese with regard to these provinces. The proclamation professes to make known to the powers in alliance and friendship with the British the causes of the war—

"in the full conviction that the exposition will establish beyond dispute the extraordinary moderation and forbearance of the British Government, and the injustice, violence and aggression of the state of Nepál" * * * * * * While the conduct of the British Government has been uniformly regulated in its relations with the Nepálese by the most scrupulous adherence to the principles of justice and moderation, there is scarcely a single district within the British frontier, throughout the whole of the extensive line above described, in which the Gorkhális have not usurped and appropriated[1] lands forming the ascertained dominions of the Honourable Company. Questions originating in the usurpations of the Nepálese have arisen in

[1] Auber says that 200 villages had been usurped by the Gorkhális between 1787 and 1812: I., 501.

Purn'ah, Tirhút, Sáran, Gorakhpur, and Bareli, as well as in the protected territory between the Satlaj and the Jumna; and each case might be appealed to in proof of the moderation and forbearance of the British Government, and the aggressive and insolent spirit of the Nepálese."

Two instances only are given in detail—namely, those which occurred at Sáran and in Gorakhpur, "which more particularly demonstrate the systematic design of the Nepálese to encroach upon the acknowledged possessions of the Honourable Company, and have, in fact, been the proximate causes of the war." We shall here refer only to the Gorakhpur case. The whole of Bútwal to the very foot of the hills, with the exception alone of the town of Bútwal, was held by the Rajas of Pálpa from the Nawáb Vazír for a considerable period antecedent to the treaty of cession in 1801, and was transferred to the Company by the schedule thereunto annexed. A settlement was made of these lands by the Collector of Gorakhpur with the Raja of Pálpa, then a prisoner at Kathmándu, for a yearly revenue of Rs. 32,000, without any objection on the part of the Nepál darbár. So it remained until 1804, when the Nepálese commenced that systematic encroachment on our possessions which terminated in their occupation of nearly the whole district of Bútwal. The Nepálese founded their claim on the circumstance that the lands occupied by them had formed part of the *tarái* attached to the hill states of Pálpa, Gaulmi, Pyuthána, &c., which they had conquered. Admitting that these lowlands were possessed by the chiefs of the neighbouring hill principalities, yet as they held them on dependent tenures from the Oudh darbár, whose representative, the British, had claimed and taken possession of them under the treaty of 1801, the Nepálese could have had no other rights than those to which they succeeded by right of conquest. They actually, at first, accepted this position and proposed to hold Bútwal in farm, to which the British Government did not think proper to accede. Remonstrances and discussions followed, with frequent interruptions for several years, during which the Nepálese continued to avail themselves of every favourable opportunity to extend their encroachments.

Fruitless negotiations.

At length a proposition was made by the Raja of Nepál that commissioners should meet and decide the respective claims of the British Government and the Nepál darbár, under express condition that, whatever

might be the issue of the inquiry, both Governments should abide by it. Major Bradshaw was appointed to act on the part of the British, and after much delay and procrastination on the part of the Nepálese the investigation was brought to a close and the right of the British Government to the lowlands was proved by the most irrefragable evidence, both oral and documentary. The Nepálese commissioners, unable to resist the force of this evidence and clearly restrained from admitting the right of the British Government by the orders of their Court, pretended that they were not empowered to come to a decision and referred the case to their own darbár for orders. The British Government communicated the result of the investigation to the Raja of Nepál and required the cession of the disputed territory, but were met with evasions and a recapitulation of the claims that had already been disposed of, and in this state the question necessarily remained until the cold weather of 1813-14. The Sáran villages had already passed into the hands of the British, and when Major Bradshaw intimated the desire of his Government to conclude the investigations which had already taken place in reference to those villages, the Nepálese commissioners refused to meet him and, revoking the conditional transfer of the usurped lands, ordered that Major Bradshaw should instantly leave their frontier and immediately returned to Nepál. This insulting and unprovoked declaration led to a letter to the Raja of Nepál reviewing the conduct of his commissioners and claiming the full renunciation of the disputed lands: adding, that if it were not made in a given time, the portions of those lands still in the hands of the Nepálese would be re-occupied and the twenty-two villages in Sáran which had been conditionally transferred to the British Government should be declared finally re-annexed to the Company's territories. This demand was not complied with, and though again made, no answer was received, and in April, 1814, the Bútwal lands were occupied by a British force without any opposition from the Nepálese.

Bútwal re-occupied by the Nepálese.

The administration of the re-annexed tract was handed over to the civil officers, who were soon enabled to establish their authority in the disputed lands. The commencement of the rainy season shortly rendered it necessary to withdraw the regular troops in order that they

might not be exposed to the malarious fevers which occur throughout that period of the year. The defence of the recovered lands was, therefore, unavoidably left in the hands of the local police levies, the apparent acquiescence of the Nepálese leaving no ground for apprehension, especially as no real violence had been used in obliging the Nepálese to evacuate the district. But the treachery and cruelty exhibitedby them in their conquests to the west of the Káli was now also shown in their re-occupation of Bútwal. On the morning of the 29th May, 1814, the principal police station in Bútwal was attacked by a large body of Nepálese troops, headed by an officer of that Government named Manráj Faujdár, and driven out of Bútwal with the loss of eighteen men killed and six wounded. Amongst the former was the darogha, or principal police officer, who was murdered in cold blood, with circumstance of peculiar barbarity, in the presence of Manráj Faujdár, after surrendering himself a prisoner. Another police guard was subsequently attacked by the Nepálese troops and driven out with the loss of several persons killed and wounded. In consequence of the impracticability of supporting the police guards by sending troops into the country at that unhealthy season, it became necessary to withdraw them, and the Nepálese were then enabled to re-occupy the whole of the disputed territory. Notwithstanding this atrocious outrage, which nothing short of unqualified submission and atonement could condone, the British Government considered it right to address the Raja of Nepál once more and explain what the consequences must be unless he disavowed the acts of his officers and punished the murderers of the British officials. This letter received an answer wholly evasive and even implying menace. The reply was accepted as it was intended as a declaration of war, and in November, 1814, the formal proclamation was issued from which the above account of the causes of the war has been taken. Between May and November, "the Nepálese with a baseness and barbarity peculiar to themselves endeavoured to destroy the troops and the subjects of the Company on the borders of Sáran by poisoning the waters of wells and tanks in a tract of considerable extent. The fortunate discovery of this attempt baffled the infamous design and placed incontrovertible proof of it in the hands of the British Government." We shall now touch briefly

on the operations of the war where they do not immediately concern us and give all necessary details for the campaign in the Dún and Kumaon.

Opening operations of the war.

Having determined on war, no time was lost in preparation and it was resolved that the Nepálese should be attacked simultaneously from several points. In Bahár, a force of about 8,000 men was placed under the command of Major-General Marley, who was ordered to march on Kathmándu, the Nepálese capital. In Gorakhpur, a force of 4,000 men was entrusted to Major-General J. S. Wood and to Major-General Gillespie, and a force of about 3,500 men was assigned the task of reducing Dehra Dún, whilst on the extreme west of the Gorkháli territories, Major-General Ochterlony with 6,000 men was to attack the enemy's positions between the Satlaj and the Jumna. We pass over the events connected with the commencement of the campaign at the eastern end of the line of attack and the more willingly as the "operations of Generals Wood and Marley were nothing short of disgraceful, betraying a carelessness, timidity and want of scientific knowledge which happily seldom occurs in the annals of the British army. The former, though his force was beyond doubt greatly superior in number to that of the enemy opposed to him, attempted little beyond defensive measures, and in what little he did attempt of a more active nature he failed. General Marley, whose division had now been raised to 13,000 men, a force (as Professor Wilson[1] says) more than adequate to encounter the whole Gorkháli army, even if its numbers had approximated to the exaggerated estimates to which they had been raised by vague report and loose computation, after two serious disasters and the loss of nearly a thousand men and two guns, ended, on the 10th of February, by shamefully abandoning his army, not only without giving any previous notice of his intention, but without making any arrangements for the command of the troops on his departure.[2] It was fortunate for the honor of our arms that Generals Gillespie and Ochterlony were men of a different stamp, though even here the latter alone showed that he possessed the true qualities of a great commander."

[1] It is doubtful whether the Nepálese had at this time more than 4,000 or 5,000 men to oppose General Marley's division. [2] Prinsep, I., 129.

Invasion of the Dún.

The operations of General Gillespie were most unfortunate, but they were not disgraceful, for he showed himself to be at least a brave and zealous soldier. His instructions were to enter the Dún and having reduced the forts in the valley either to proceed eastwards and rescue Srinagar from the hands of the forces under Amar Singh Thápa or to proceed westwards and take Náhan, then held by Ranjor Singh Thápa, and so separate the Gorkháli forces. The force[1] destined for the Dún left Saháranpur, under the command of Lieutenant-Colonel Mawby of the 53rd Regiment, on the 19th October 1814. One column under Colonel Carpenter advanced by the Timli pass, whilst the main body entered the valley by the Mohan pass and united at Dehra on the 24th October. The Gorkhális held the small fort of Kalanga or Nálapáni situate on the highest point of a low spur about three and a half miles north-east of Dehra. The hill itself is not more than five or six hundred feet high and is very steep except towards the south where the fort was built, and was then as now covered with a jungle of *sál* trees. The table-land on the top is about three-quarters of a mile in length and was protected by an irregular fortification, following the form of the ground and still incomplete, but the garrison were busily engaged in raising and strengthening it.[2] There were only some three or four hundred of the regular troops of Nepál present under the command of Balbhadra Singh Thápa, nephew of Amar Singh, who commanded in Garhwál. Colonel Mawby sent a messenger the same night to demand the surrender of the fort, and it found Balbhadra Singh at midnight enjoying a well-earned repose. The Gorkháli commander read the letter and tore it up, vouchsafing no other answer than that "it was not customary to receive or answer letters at such unseasonable hours: but he sent his salám to the English sardár assuring him that he would soon pay him a visit in his camp." Colonel Mawby thought next day to punish this insolent barbarian, and mounting a couple of 6-pounders and two howitzers on elephants proceeded to take the fort by assault.

[1] The troops employed were:—

Artillery 247 men: Her Majesty's 53rd (or Shropshire) Regiment 785 men; 1-6th, 1-7th and 1-17th Native Infantry, 2,348 men and 133 pioneers; total 3,513 men with two 12-pounders, eight 6-pounders, and four howitzers. [2] Mr. J. B. Fraser's valuable "Journal of a tour through part of the snowy range of the Himálá mountains and to the sources of the rivers Jumna and Ganges," London, 1823, is the principal authority for the Dún campaign, pp. 13, 27.

But a few rounds were fired when the task was given up as impracticable and the British force returned to Debra with less contempt for the enemy and a more just appreciation of the work before them. On the 26th, General Gillespie joined and took command of the force. A more careful reconnoissance was made and orders at once followed for an assault, the preparations for which show a remarkable contrast to those made by Lieutenant-Colonel Mawby. Fascines and gabions were prepared beforehand and all the howitzers and 12-pounders and half the 6-pounders were sent on elephants to the table-land, which was occupied without opposition. Batteries were at once prepared for the guns, and four separate storming parties[1] were ordered to be ready for the assault, which was fixed for the morning of the 31st October. The enemy had done everything possible with the men and materials at his disposal. The wall, although not yet complete, was raised sufficiently to render its escalade without ladders practically impossible. Gaps were filled up with stones, stockades were erected along the lines of approach, and at a wicket open, but cross-barred, a gun was placed which enfiladed the principal side of attack. The British guns played on the fort for some time, but did little execution, and "this, perhaps," writes Fraser, "uniting with the eagerness of a sanguine temper, induced General Gillespie to give the signal for assault some hours sooner than it was intended." The consequence was that three out of the four columns took no part in the attack, and the column under Colonel Carpenter with the reserve under Colonel Ludlow had to bear the whole brunt of the fighting.

First attack on Kalanga.

The assault commenced at nine in the morning and the stockades were easily carried, but on approaching the walls the British suffered severely in both officers and men. No ladders were forthcoming for a time, and the first applying them was Lieutenant Ellis of the Pioneers, who was shot dead in the attempt. The obstacles were then found to be too great to be overcome, and the troops were obliged to retreat under shelter of a village in the rear. The General then led in person three fresh companies of the 53rd Regiment and had barely

[1] The attacking party was formed into four columns and a reserve: 1. (a) Colonel Carpenter with 611 men; (b) Captain Fast with 363 men; (c) Major Kelly with 541 men; (d) Captain Campbell with 283 men, and the reserve of 959 men under Colonel Ludlow. These were all to ascend, on a gun being fired, from different points and so distract the attention of the enemy.

reached a spot in front of the wicket, "where, as he was cheering on his men, waving his hat in one hand and his sword in the other, he received a shot through the heart and fell dead on the spot. His aide-de-camp O'Hara was killed beside him and many other officers were wounded." Colonel Carpenter, who succeeded to the command on the death of General Gillespie, deemed it prudent to retreat to Dehra and there wait for further reinforcements. The gun at the wicket did much damage to the attacking party, and "when the reserve advanced and got within the line it defended, the first discharge brought down the whole front line, killing seven and wounding eleven. Several persons penetrated to this very wicket, but, unsupported, could produce no effect. A very heavy fire was kept up from the walls by the garrison and showers of arrows and of stones were discharged at the assailants, and many severe wounds were received from stones which they threw very dexterously: the women were seen occupied in throwing them, regardless of exposure." Five officers were killed and fifteen were wounded, of whom several died subsequently of the injuries then received: 27 non-commissioned officers and men were killed and 213 were wounded. Out of a detachment of 100 dismounted men of the 8th Light Dragoons (now the 8th Hussars), the General's old corps, four men were killed and fifty were wounded. So ended the first memorable assault on the petty fort of Kalanga.

Second attack on Kalanga.

It was not until the 24th November that the arrival of a siege battery from Delhi enabled the British to resume the attack on Kalanga. On the following day active operations recommenced and batteries were erected within three hundred yards of the wall of the Gorkhâli fort, and by the 27th, a practicable breach was effected almost without any loss, though the enemy kept up a warm and well-directed fire. Shells had been used with great effect and a sally of the enemy had been repulsed with loss, so that everything promised well for the assault. The storming party was led by Major W. Ingleby of the 53rd Regiment and consisted of two companies of that regiment and all the grenadiers of the detachment. "They advanced to the breach and stood for two hours exposed to a tremendous fire from the garrison which caused the

loss of many officers and men: but after every exertion on the part of their officers and the fall of many in leading and endeavouring to push them forward in spite of the obstacles that were opposed to them, without any success, it was deemed expedient to order a retreat, and the whole returned to the batteries." The Gorkhális made a gallant and desperate defence, standing themselves in the breach whilst using every missile that came to hand, balls, arrows and stones. The British advanced in a cool and self-possessed manner; a few got to the crest of the breach and fell there, but the majority remained below exposed to a murderous fire. "No one turned to fly, but none went onwards; they stood to be slaughtered, whilst their officers exposed themselves most gallantly and unreservedly." Lieutenant Harington of the 53rd fell in the breach leading on his men, and Lieutenant Luxford of the Horse Artillery was killed whilst training his gun on the defenders of the breach. The official returns show three officers killed and eight wounded, and 38 men killed and 440 wounded and missing during the attack. Thus the disastrous results of the first attack were repeated, and it was only now discovered that there was no water within the fort, and that the besieged were obliged to supply themselves from a spring at some distance from the walls. Arrangements were at once made to cut off the water, and the fire from the batteries recommenced the next day, doing great damage from the unprotected state of the garrison and the shattered condition of their defences. On the night of the 30th November, only three days after the adoption of the measures which were equally feasible a month earlier, had they been adopted, Balbhadra Thápa with seventy men, all that remained of his garrison, evacuated Kalanga. The Gorkhális cut their way through the chain of posts placed to intercept them, and escaped to a neighbouring hill closely pursued by Colonel Ludlow. Of the condition of the fort Mr. Fraser writes:—

"At three o'clock that morning, Major Kelly entered and took possession of the fort; and there indeed the desperate courage and bloody resistance they had opposed to means so overwhelming were mournfully and horribly apparent. The whole area of the fort was a slaughter-house, strewed with the bodies of the dead and the wounded and the dissevered limbs of those who had been torn to pieces by the bursting of the shells; those who yet lived piteously calling out for water, of which they had not tasted for days. The stench from the place was dreadful. Many of the bodies of those that had been early killed had been

insufficiently interred: and our officers found in the ruins the remains and the clothes of several thus incompletely covered starting into view. One chief was thus found out, who had fallen in the first attempt, and had received this wretched semi sepulture. The bodies of several women, killed by shot or shells, were discovered; and even children mangled, and yet alive, by the same ruthless engines. One woman, who had lost her leg, was found and sent to the hospital, where she recovered; a young child was picked up, who had been shot by a musket ball through both his thighs, and who also perfectly recovered; and there was also a fine boy of only three or four years old, whose father, a subahdár, had been killed, and who was left in the fort when it was evacuated; he was unhurt and was taken care of. Upwards of ninety dead bodies were burnt by our native troops; and about an equal number of wounded were sent to the hospital and carefully treated: several prisoners also were taken.

The determined resolution of the small party which held this small post for more than a month, against so comparatively large a force, most surely wring admiration from every voice, especially when the horrors of the latter portion of this time are considered; the dismal spectacle of their slaughtered comrades, the sufferings of their women and children thus immured with themselves, and the hopelessness of relief, which destroyed any other motive for the obstinate defence they made, than that resulting from a high sense of duty, supported by unsubdued courage. This and a generous spirit of courtesy towards their enemy, certainly marked the character of the garrison of Kalanga, during the period of its siege. Whatever the nature of the Gorkhális may have been found in other quarters, there was here no cruelty to wounded or to prisoners; no poisoned arrows were used, no wells or waters were poisoned; no rancorous spirit of revenge seemed to animate them: they fought us in fair conflict like men, and, in the intervals of actual combat, showed us a liberal courtesy worthy of a more enlightened people. So far from insulting the bodies of the dead and wounded, they permitted them to lie untouched till carried away; and none were stripped, as is too universally the case. The confidence they exhibited in the British officers was certainly flattering: they solicited and obtained surgical aid; and on one occasion this gave rise to a singular and interesting scene: While the batteries were playing a man was perceived on the breach, advancing and waving his hand. The guns ceased firing for a while, and the man came into the batteries: he proved to be a Gorkha, whose lower jaw had been shattered by a cannon shot, and who came thus frankly to solicit assistance from his enemy. It is unnecessary to add that it was instantly afforded; and, when discharged from the hospital, signified his desire to return to his corps to combat us again: exhibiting thus, through the whole, a strong sense of the value of generosity and courtesy in warfare, and also of his duty to his country, separating completely in his own mind private and national feelings from each other, and his frank confidence in the individuals of our nation, from the duty he owed his own, to fight against us collectively."

From the fall of Kalanga to the invasion of Kumaon.

The seventy men who escaped from the fort were soon after joined by some three hundred others who had been seen hovering about the

neighbourhood endeavouring to find a way into the fort. Major Ludlow was sent after these with some four hundred of our troops and succeeded in attacking their camp by night and dispersing them with the loss of over fifty killed. The British loss here consisted of but two officers and fifteen men wounded. In the meantime Colonel Carpenter had taken measures to guard the entrance to the hills at Kálsi and sent Captain Fast with a detachment to occupy some positions above that town, which resulted in the surrender of the fort of Bairát on the 4th December. The following day the troops marched through the Timli pass on their way to Náhan, to join the force under Major-General Martindell.[1] Balbhadra Thápa with the remains of his party threw himself into the fort of Jauntgarh[2] and defended himself successfully against a force despatched against him under Major Baldock. He subsequently joined the Gorkháli force at Jaithak, and on the surrender of that place entered the Sikh service, where he and all his followers

[1] The fort of Kalanga was razed to the ground before the troops left and now but a slight unevenness in the ground marks the spot where the great fight took place. Two small monuments have been erected, one in memory of Sir Robert Rollo Gillespie and the officers, non-commissioned officers and soldiers who died there, and the other in memory of Balbhadra Thapa and the gallant Gorkháli defenders of the fort. The following is a copy of the inscriptions as given by Mr Williams:—

I.

West side.	*East side.*
To the memory of	Troops engaged.
Major-General Sir Robert Rollo Gillespie, K.C.B.	Detachments horse and foot artillery.
Lieut. O'Hara, 6th N. I.	100 men of the 8th Royal Irish Light Dragoons who were dismounted and led to the assault by Sir R. R. Gillespie, H. M. 53rd Regiment.
Lieut. Gosling Light Battalion.	5 Light Companies from corps in Meerut.
Ensign Fothergill, 17th N. I.	1st Battalion, 6th N. I.
Ensign Ellis, Pioneers, killed on the 31st October, 1814.	Ditto 7th do.
Captain Campbell, 6th N. I.	Ditto 15th do.
Lieut. Luxford, Horse Artillery.	Ditto 17th do.
Lieut. Harington, H. M. 53rd Regt.	
Lieut. Cunningham, 13th N. I., killed on the 27th November	7th Native Cavalry, one Rissalah of Skinner's Horse.
And of the non-commissioned officers and men who fell at the assault.	

II.

West side.	*East side.*
On the highest point of the hill above this tomb stood the fort of Kalanga.	This is inscribed as a tribute of respect for our gallant adversary.
After two assaults on the 31st October and 27th November it was captured by the British troops on the 30th November, 1814, and completely razed to the ground.	Bulbudder, commander of the fort, and his brave Gurkhas, who were afterwards, while in the service of Ranjít Singh, shot down in their ranks to the last man by Afghán artillery.

[2] Two petty officers who sought to desert to the British at Jauntgarh were executed there by orders of Balbhadra.

perished in a war with the Afgháns. The Dún force together with that under General Martindell were ordered to attack Náhan, where Ranjor Singh, the son of Amar Singh Thápa, still held out with more than two thousand men to support him. On the 24th December, Náhan was occupied by the British troops, the Gorkhális retiring on our approach to Jaithak, a fort and strong position a little to the north, 1,600 feet above the town and nearly 5,000 feet above the sea. The fort was attacked without loss of time, but unsuccessfully, and the British troops were repulsed with a loss of between four and five hundred men, so that General Martindell attempted no active operations for nearly three months. After this succession of reverses on many points it is satisfactory to have to record the proceedings of a very different commander. At the end of October, 1814, General Ochterlony with about six thousand men entered the hills on the left bank of the Satlaj, with the view of dislodging the Gorkhális from the strong positions which they held between Biláspur on that river and the outer hills above the Pinjor Dún. The enemy's force consisted of about three thousand men, and was commanded by Amar Singh Thápa, the mosts kilful of all the Gorkháli officers and who had gained a high reputation in the former wars of his nation. Among the numerous posts in the possession of the Gorkhális, the most important were Rámgarh and Malaun. General Ochterlony soon discovered the character of the enemy with whom he had to deal, and that it was not by hard fighting that his sepoys would be able to beat the Gorkhális. The months of November, December, and January were occupied by a series of movements, by which General Ochterlony, without exposing his troops to any dangerous adventures, forced Amar Singh to abandon most of his positions and to concentrate his forces round Malaun.

Having reached this period of the war we must speak of the events which were happening in Kumaon, and with which we are more particularly concerned. Lord Hastings, in October, 1814, had received information which led him to suppose that Bam Sáh, the governor of Kumaon, being disgusted with the proceedings of the Thápa party, which at this time exercised the chief authority in Nepál, would not be disinclined to assist the views of

the British Government and to deliver up his charge into their hands.

Mr. Gardner sent towards Kumaon.

Accordingly, early in November, Mr. C. T. Metcalfe, Resident at Dehli, received orders to send his second assistant, the Hon'ble E. Gardner of the Bengal Civil Service, to Moradabad, to open a correspondence with Bam Sáh in order to ascertain whether the opinion that had been formed of his disaffection to the existing Government of Nepál was well founded. The extensive line of frontier against which it was necessary to direct our operations, as well as the threatening attitude of other states, made it impossible to send a force of regular troops to support Mr. Gardner's negotiations. This difficulty augmented the importance of a pacific arrangement with Bam Sáh and his brother, but at the same time to attain this object it was necessary to possess the means of occupying Kumaon, should Bam Sáh agree to espouse our cause as well to give colour to his secession as to protect our interests in Kumaon itself. It was, therefore, intended that Major-General Gillespie should send a force towards Kumaon which aided by a body of irregulars might be sufficient to hold the district with the concurrence of Bam Sáh and overawe any part of the Gorkháli forces which might not adhere to the arrangements made. In the meantime, Mr. Gardner was instructed[1] that his first duty was to ascertain the disposition of Bam Sáh, and it was pointed out to him that this might be accomplished by means of the persons connected with the trading agencies at the foot of the hills. Both Bam Sáh and his brother Hastidal, since their exclusion from public affairs, had turned all their attention towards commercial operations and now held the monopoly of the trade passing through Chilkiya and Barmdeo which brought them in a considerable revenue. At the same time the Company's factory at Káshipur, under the superintendence of Dr. Rutherford as trading agent, kept up a continual connection with the hills, where a large quantity of hemp was raised and prepared, on a system of advances, for the Company's investment.

Annexation resolved on.

Should the inquiries regarding the views and dispositions of Bam Sáh be such as to encourage the attempt to open up a direct negotiation with him, Mr. Gardner was instructed that, though it was first

[1] G. I. to C. J. Metcalfe, 23rd October, 1814.

contemplated to provide for Bam Sáh by establishing him in the independent occupation of Kumaon with his brother in Doti, it was now resolved eventually to annex Kumaon to the Company's territory "as a part of the compensation[1] which the British Government were entitled to demand for the expense of a war produced solely by the encroachments of the enemy." Under this view of the case Mr. Gardner was limited to the offer of a *jágír* either in Kumaon itself or in some other quarter, with suitable provision for the relatives and dependents of Bam Sáh and his family proportional to the emoluments then enjoyed by them as well from their offices as from the profits of trade, but that it was desirable to reserve as much as possible in the hands of Government the details of the arrangements to be made, giving in the first instance a general assurance only of protection and an honourable maintenance. With regard to Lál Singh it was decided that any attempt to restore him to the possessions temporarily held by his family would be obnoxious to the people in general, and the circumstances under which his brother obtained the chief authority in Kumaon deprived him of that consideration which the Government was disposed to show to the surviving representatives of the families formerly reigning in the principalities in the hills. Mr. Gardner was, therefore, authorised to adopt such measures as might be necessary to prevent Lál Singh from interfering in Kumaon affairs; and should necessity arise, Kumaon was to be occupied by force of arms in the interests of the British Government alone. Moreover, had the British desired to restore a member of the ancient house, there existed at this time in Parewa, in parganah Kota, direct legal descendants of Lachhmi Chand, son of Rudra Chand, and in Jíba, a village in parganah Sor, direct and legal descendants of Kalyán Chand, besides many spurious descendants of Rudra Chand. There were also descendants of the daughter of Díp Chand who married Subkaran, son of Jodha Singh Katehiri, any of whom, if it was thought desirable, would have been preferable

[1] It would appear, however, that the principal motive for retaining Kumaon was the better means it possessed for communication with Tibet and opening up a trade with Western China, an object as eagerly sought after then as the Central Asian trade was of late years, and with as little practical result. Notes by W. Fraser, Moorcroft, Raper, Hearsey and Rutherford on the state of Garhwál and Kumaon accompanied the instructions given to Mr. Gardner.

to Lál Singh, a junior member of an usurping family, as Raja, or even to Bam Sáh himself as farmer, as was first intended.[1]

Invasion of Kumaon determined on.

The unfortunate commencement of the campaign in Bahár and Gorakhpur and the disasters that had occurred at Nálapáni made Lord Hastings, about two months after Mr. Gardner's appointment, still more anxious to obtain a footing in Kumaon. This was the more desirable as it had now become impossible to divert a portion of the Dún force towards Srinagar, an operation which would have to some extent answered the purposes expected to be gained by a direct attack upon Kumaon. It was known that Kumaon and the adjoining provinces had been nearly drained of troops in order to supply the urgent calls of the Gorkhális both to the east and west, and the notorious hatred which the people of the country felt towards their Gorkháli rulers promised to afford us important assistance in any efforts which we might make in this quarter. Not only was Kumaon the most valuable of the Gorkháli territories west of the Káli, but it derived at this time a special importance from the fact that through it all the communications had to be carried on which passed between the Nepál Government and their armies beyond the Ganges. For as the Gorkhális held no possessions beyond the foot of the mountains, this was the sole route that remained open to them.

[1] Government to Hon'ble E. Gardner, 22nd November, 1814. "For years the family of Mohan Singh by the aid of their Rohilla levies and the terror inspired by the murder of their opponents held the nominal possession of Almora. Since then the Gorkhális had for quarter of a century occupied the country, so that no shadow of moral or even sentimental right can have vested in Lál Singh, who was himself personally obnoxious to the people." Subsequently (22nd November, 6th December, 1814) Mr. Gardner reported that there was not the least apprehension that Lál Singh could in any way interfere in Kumáon affairs, and in reply he was directed "to avoid any step which might be construed into an encouragement of Lál Singh's pretensions to Kumaon" (Government, dated 14th December, 1814 : 25th January, 1815). On offering his services to join in the invasion of Kumaon, he was peremptorily told that he was not required. Partáb Singh, his grand-nephew, claimed the zamindári of Kumaon when it was shown that the proprietary right and sovereign right were vested in the same individual, and were wrested from the former Rajas by the Gorkhális and afterwards from the Gorkhális by the British, and consequently the usurping family of Mohan Chand could have no claim (to Government, dated 13th August, 1820, and 28th April, 1821, and from Government, dated 26th May, 1821). A similar reply was given to Partáb Singh's claim to the zamindári of the Tarái (Board to Governor-General in Council, 4th May, 1821, No. 35).

It was consequently decided in December 1814, that, whatever might be the issue of the negotiations with Bam Sáh, an attempt should be made to wrest Kumaon from the Nepálese, and Lord Hastings formally declared his determination, in case the projected operations should prove successful, permanently to annex the province to the British dominions.[1] Lieutenant-Colonel Gardner and Captain Hearsey,[2] who had formerly served in the Maráttha army, and the first of whom was at this time in command of a body of irregular horse employed in police duties, were appointed to raise a force of Rohillas for the attack on Kumaon. Captain Hearsey was placed under the orders of Lieutenant-Colonel Gardner, and both these officers lost no time in carrying out their instructions under the general control of the Honourable E. Gardner, who was appointed Agent to the Governor-General. During the month of January 1815 preparations were actively carried on in Rohilkhand for the projected attack on Kumaon; Mr. E. Gardner and Lieutenant-Colonel Gardner having their headquarters at Káshipur in the Moradabad distict, while Captain Hearsey carried on his preparations at Bareilly and Pilibhít and Dr. Rutherford was attached to the force in the character of Surgeon, Commissariat Officer and Officer in charge of the treasure, postal and intelligence departments. On the first sound of the preparations becoming known, the Gorkháli garrisons in Kumaon were strengthened, and Hastidal Sáh was directed to protect Khairágarh and Doti and build forts at Banbasa and Mundiyaghát on the Sárda. The Patháns of Rámpur were enlisted, and Sháh Wali, formerly farmer of Rúdrpur, was made warden of the posts lying along the foot of the hills.[3] These proceedings were met by a proclamation forbidding the subjects of the Company and its allies from engaging in the service of the Nepálese, and calling on those who, had already engaged in that service to abandon it before the end of November.

Preparations.

[1] Nepál papers, p. 301: letters, Government, dated 23rd October, 14th, 17th and 22nd December, 1814. By the last the force of Colonel Gardner was raised to 3,000 men and that of Captain Hearsey to 1,500 men. [2] Captain Hearsey accompanied Mr. Moorcroft in his journey to Tibet in 1812, and had been detained as a prisoner with his companion in Kumaon the very year before the war broke out. [3] Sháh Wali was farmer of Rúdrpur at the cession and was expelled for defalcation. Amar Singh Thápa gave him the farm of the customs' posts from Hardwár to Bilhari for Rs. 1,000 in exclusion of the Heris and Mewátis who had been placed there by Mr. Seton, the Collector of Moradabad.

Towards the end of the year a second proclamation,[1] declaring war against the Gorkhális, was distributed amongst the hill people, and resulted in the return of the new Pathán levies to the plains. These in true oriental fashion formed the nucleus of the new irregular regiments raised for the special service of invading Kumaon.

Failure of negotiations with Bam Sáh.

Mr. Gardner's efforts to open communications with Bam Sáh from Moradabad proved unsuccessful, and on the 1st January, 1815, he moved his head-quarters to Káshipur, where he again made an attempt to communicate with the Nepálese governor. The negotiations led to no result, the Chauntra sending evasive answers[2] to the overtures that were made to him. It appeared that however much he might be dissatisfied with the state of affairs in Nepál, he was not inclined to betray the trust that had been reposed in him, and it became evident that the expedition must depend for success on its own exertions and not on any expectations of treachery on the part of Bam Sáh. Mr. Fraser, the Political Agent attached to General Martindell's force, had for some time past been in communication with Harak Deb[3] Joshi, who as hereditary minister of the former

[1] Proclamation addressed to the inhabitants of Kumaon (prescribed by letter of Government, dated 14th December, 1814):—"The British Government has long beheld with concern the misery and distress to which the inhabitants of Kumaon have been reduced by the oppressive sway of the Gorkhá power; while that power, however, was at peace with the British Government, and afforded no ground to doubt its disposition to maintain that relation, the acknowledged obligations of public faith demanded a corresponding conduct on the part of the British Government, and obliged it to witness in silent regret the devastation and ruin occasioned by the extension of the Gorkhá power over that country. Having now been compelled by a series of unprovoked and unjustifiable encroachments and violence on the part of the Gorkhás to take up arms in defence of its rights and honour, the British Government eagerly seizes the opportunity of rescuing the inhabitants of Kumaon from the yoke of their oppressors, and a British force has advanced into that country for the purpose of expelling the Gorkhá troops and for excluding from it for ever the power and authority of that State. The inhabitants are accordingly invited and enjoined to assist to the utmost of their power in effecting this great object, and to submit quietly and peaceably to the authority of the British Government, under whose mild and equitable administration they will be protected in the enjoyment of their just rights and in the full security of their persons and property." [2] Bam Sáh addressed Mr. Colebrooke, Agent to the Governor-General for the Ceded Provinces, and sent messengers who, however, were charged to make no specific proposals and merely to express general good-will (to Government, dated 28th February, 19th March, 18th April, 1815). [3] Harak Deb was introduced to Mr. W. Fraser by Captain Hearsey, who thus describes him in 1814:—"This man is a perfect instrument whose name the Gorkhális dread; his connections in Kumaon amount to above 6,000 men, he is now near 68 years old, but is active and vigorous and has all his faculties clear; his influence is great on all the hill Rajas, even extending beyond the Satlaj." Mr. Fraser writes:—"Although exceedingly depressed by misforture and penury, he still possesses an active, energetic and enterprising mind." Though informed fully of the intentions of the British Government to keep possession of Kumaon,

Chand Rajas, had exercised before the Gorkháli conquest an almost despotic authority in Kumaon. Harak Deb had used his power so freely that he was not unaptly called by Captain Hearsey "the Earl Warwick of Kumaon." The Gorkháli conquest had been fatal to his authority, and he readily engaged to use all the influence that he possessed to assist the British in expelling the Gorkhális from the province. Now close upon seventy years of age, he joined Mr. Gardner at Káshipur in the beginning of January and began immediately to enter into communications with his friends in Kumaon, to prepare them for the approach of the British forces.

At the end of January everything was ready for the attack on Kumaon. The whole force consisted of about 4,500 men with two six-pounders. It was determined[1] to make the attack simultaneously in two quarters. The main body consisting of about 3,000 men, with the two guns, under Lieutenant-Colonel Gardner, was to proceed up the valley of the Kosi by Chilkiya, and to direct its march upon Almora; and Captain Hearsey's detachment, about 1,500 strong, was to move from Pilibhít up the Káli and to enter the district of Káli Kumaon by the Timla pass. The ex-Raja of Doti, Prithipat Sáh, who had formerly been expelled by the Gorkhális, had made overtures in January to Mr. Gardner, engaging, if he received the assistance of a small British force, to enter Doti and endeavour to re-establish his authority in that province. It was considered[2] important to make a diverson in that quarter, in order that Hastidal, the Gorkháli commander in Doti, might be prevented from sending reinforcements to Kumaon, and five hundred men were therefore raised who were to accompany Prithipat Sáh. Before, however, the attack on Kumaon commenced, it was thought advisable to postpone the execution of this scheme; the diversion under Prithipat Sáh was countermanded and the

Harak Deb now threw his whole influence in their favor, as his party was always opposed to Lál Singh, who was countenanced by the Gorkhális. One of the first results of his communications to his friends was that a body of them, including Márás, Phartiyáls, Tarágis and others, joined Captain Hearsey's force with 100 matchlockmen (to Agent, dated 19th February, 1815). Harak Deb accompanied our force to Almora and died on the 26th July, 1815, leaving two sons and a nephew, who were pensioned by our Government. (To Government, dated 12th August and 7th September, 1815.)

[1] Government to Hon'ble E. Gardner, dated 25th January, 1815.

[2] *Ibid*, 11th and 25th January, 13th and 19th February, 1815.

troops that had been raised for this service were recalled from Bilhari and were united to the force under Captain Hearsey.

Disposition of the invading force.

On the 9th of February, 1815, five hundred men were sent to Rúdrpur, where they were ordered to halt until they received intelligence that the main body was about to enter the hills; they were then to march to Bhamauri, to attack the fort of Barakheri towards Bhím Tál, where the Gorkhális had a post, and to endeavour to rejoin by Ramgarh and Piura the main body under Lieutenant-Colonel Gardner after it had established itself in the hills. Captain Hearsey was ordered to enter the hills immediately by the Timla pass, so that the attacks should be made simultaneously. Bad weather and a deficiency of carriage caused some delay, but on the 11th of February Lieutenant-Colonel Gardner marched from Káshipur with his whole force, accompanied by Mr. E. Gardner. A large number of men had been collected to carry the luggage of the troops when they entered the hills, and part of the heavy stores were taken on elephants, which, notwithstanding the difficulty of the country, were found very useful. The force reached Kaniyási on the 12th February, Chilkiya on the 13th, and Amsot on the 14th, from which place a small outpost of Gorkhális retreated on the advance of the column. The advanced guard reached Dhikuli on the Kosi at the entrance of the hills on the evening of the 15th. Here the Gorkhális had a stockaded fort, which they evacuated on our approach without resistance, and a body of Manihárs deserted from them and took service with us. A detachment was left at Dhikuli to keep open the communications with Chilkiya and the plains, and, on the 16th February, the force marched up the valley of the Kosi to Chukám, where it was found necessary to halt for two days to bring up the stores and ammunition which had been delayed for want of carriage. The force was now fairly within the hills, and it was necessary before proceeding onwards to secure the communications in the rear. The Gorkhális had a post at Kota Garhi on the right bank of the Dabka, fifteen miles to the south-east of Chukám, which was in dangerous vicinity to our line of communications. Three hundred men were detached on the 18th February to dislodge the enemy from this position. The Gorkhális evacuated the place on our approach and retired into the hills, and a

detachment of our troops was left to keep possession of the post. A party of 300 men were also sent from Chukám on the 18th to occupy the Tanguraghát, a narrow defile about a mile above, through which runs the road up the valley of the Kosi.

March on Ránikhet.

On the ridge which separates the Rámganga and Kosi, three or four miles north of Chukám, at Kath-ki-nau, the Gorkhális had a stockaded post, from which it was necessary to dislodge them, as it threatened the line of our communications. On the 19th, five hundred men were detached against Kath-ki-nau, which was evacuated on our approach, the enemy retreating to the Gágar fort. On the same day the main body marched up the Kosi to Ukhaldúnga, a distance of about seven miles. Late in the evening, a party was pushed forward from our position on the right to occupy a hill communicating with the Tangura and Lohgaliya ghâts, and the enemy perceiving the movement advanced in the same direction, our party gaining one height as they did the other; a musketry skirmish ensued and continued till dark, when our men advanced and drove the enemy from their positions. The passage of the ghâts was now secured and information also came in that the two forts at Kota had been abandoned by the enemy. On the 21st, the advanced guard consisting of 700 men was pushed forward to Sethi, five or six miles higher up the valley, where Lieutenant-Colonel Gardner took all necessary precautions against a night attack. On the way, intelligence was received that a Gorkháli force, estimated to be about 800 strong, had marched from Almora under Angat Sirdár and had taken up a position at Bujân, about fifteen miles higher up the valley, on the main road to Almora, where it had been joined by the garrisons of Kota and Kath-ki-nau. As it was evidently not advisable to risk an attack on the Gorkháli force with the raw levies under his command, Lieutenant-Colonel Gardner determined to leave the valley of the Kosi and the direct road to Almora, and striking off to the left to endeavour to turn the enemy's position. The Kosi in the first twenty miles of its course flows in a direction nearly north and south. Some miles below Almora, it turns somewhat abruptly to the west, and runs on in that direction to Chukám, in its course towards the plains. Bujân between Kakrighât

and Khairna, where the Gorkhális had taken up their position, is situated near the apex of the triangle thus formed, and to cut off this bend in the river a path strikes across the hills from the upper part of the valley of the Kosi, again entering the same valley near Pant Pípal and Amel, about fifteen miles above Chukám. Lieutenant-Colonel Gardner determined to follow this route. The distance to Almora was not much greater than by the road along the Kosi, and, although the natural difficulties were perhaps greater, there were many advantages afforded by this route, even if the Gorkhális had not been posted at Bujáu. By thus striking off, he could open communications with the western part of the province which was known to be greatly disaffected to the Gorkháli cause. This was the richest part of Kumaon and he could hope to draw from it plentiful supplies of provisions for his troops, while he would be enabled at the same time to cut off those of the enemy and to intercept communications with their armies west of the Ganges. Another important advantage which this route held out was that by it the British could approach Almora itself on its most open and least defensible side.

Chaumukhia.

On the 22nd February, the force advanced a few miles up the Kosi to Amel, and thence on the same day Lieutenant-Colonel Gardner, turning to the left, pushed forward with 300 men past Binakot, to seize the commanding post of Chaumukhia or Chaumua Devi situated on the range which separates the Kosi from the Rámganga, at an elevation of 6,354 feet above the sea. Owing to the steepness of the mountain and the fatigue caused by an ascent of not less than 4,000 feet, only forty or fifty men reached Chaumua Devi by sunset. During the night a few more came in, and next morning the rest of the party arrived. The ground was covered with snow, which prevented the difficulty that would otherwise have arisen from the want of water. The Gorkhális under Angat Sirdár, perceiving that our force had changed the line of its attack and had left the valley of the Kosi, divined our object and immediately marched towards Chaumua to endeavour to gain that point before our arrival. But they were too late, and when they were about four miles distant, finding that the post was already occupied by the British, and thinking themselves too

weak to attempt an attack, they fell back. The possession of this post was of great importance to our operations, as it opened the road towards Almora and gave us the means of communicating with the western districts of Kumaon and Garhwál. The rest of the force reached Chaumua on the 25th February, and on the following day the guns and the elephants with the heavy baggage were got up the hill with much labor and difficulty. The delay in the arrival of the depôt of supplies made it, however, impossible to move onwards at once. From intercepted letters, it subsequently appeared that it was the intention of the enemy to defend both these points to the uttermost, but the onward march to Tangura drove their advanced guard back, and it was not supposed that the British would attempt the more rugged road by Binakot. The expectation that by taking this road plentiful supplies would come in was fulfilled; the people everywhere were most friendly, bringing in grain and fodder, giving information of the movements of the enemy and rendering aid in every way possible.

Gorkhális occupy Kumpur.

The range called Kathál-lekh, on which the British were now encamped, runs in an easterly direction towards Almora. The path follows the ridge, and there are no great difficulties in the way. The Gorkhális determined to make another attempt to stop our progress and to interpose their forces between us and Almora. They therefore ascended the mountain, and marching to Kumpur (Ránikhet), a small temple 5,983 feet above the sea, a few miles in front of our encampment at Chaumua, stockaded themselves in a very strong position which commanded the road to Almora. Police levies, each consisting of fifty men under a darogha, were placed at Kota and Kath-ki-nau to relieve the troops, who could ill be spared from active service at this time, and it was also found necessary to leave a guard of 200 men at Chaumua for a depôt for the provisions which had not yet arrived. On the 28th February the British force made a short march to a hill called Kapina-ke-dánda near Kumpur and encamped opposite to the enemy's stockade. The Gorkháli force was estimated to be about one thousand strong, with one gun, and their position was so well chosen that it was considered undesirable to attempt to carry it

by assault, while at the same time Lieutenant-Colonel Gardner was unprovided with the means of regularly attacking and breaching the stockade. It was therefore determined, as there was no immediate probability of the Gorkhális receiving any considerable reinforcements, to suspend active operations until our force could be joined by a body of Rohillas which had been raised at Hápur in the Meerut district, and who were soon expected to enter the hills in support of Colonel Gardner's force.

Siyáhi Devi occupied.

From the 28th February to the 22nd March, the British force remained encamped near Kumpur, and with the exception of two unimportant actions, in both of which our Rohilla levies were successful, no military operations took place. In the first of these skirmishes, the Rohillas drove back a party of the enemy who ventured to descend from their stockade into the valley of Tarkhet which lay between them and the British, and in the second, where some six hundred of them were engaged, they drove back an equal number of the enemy who had ventured again on the same ground. On the 22nd March, the long expected reinforcements from Hápur, consisting of 850 men, arrived, and it was determined immediately to resume active operations against the Gorkhális south-east of Kumpur. Half way between it and Almora is the mountain called Siyáhi Devi, the summit of which reaches an elevation of 7,186 feet above the sea. This mountain, which is one of the most conspicuous objects in the view from Almora, rises immediately above the Kosi on a ridge which runs down in a direction almost perpendicular to that of the Kathál-lekh and the Ryúni range, which separate the basin of the Kosi from that of the Rámganga. Lieutenant-Colonel Gardner perceived that the possession of this point would render it absolutely necessary for the Gorkhális to abandon their position at Kumpur, for the entire British force could thus be placed between them and Almora and would only be separated from the capital by the valley of the Kosi. The Gorkhális had taken no precautions against any such movement, nor had they in any way provided for the safety of Siyáhi Devi, a neglect that was mainly the result of want of skill in their leaders, but for which the insufficiency of the means at their disposal furnished some excuse. Almora itself must have been at this time almost

denuded of troops. During the night of the 22nd March, a detachment consisting of twelve hundred men was sent off toward Siyáhi Devi. They marched in a south-easterly direction, descending into the valley of the Panor, a confluent of the Ulabagar, which runs down from the Ryúni range immediately under Siyáhi Devi. The following morning a demonstration was made against the enemy's stockade at Kumpur in order to draw off his attention from the movements that was taking place on our right, and soon afterwards information was received that a post of 500 men had been established at Bajol, ten miles off and four miles distant from the enemy's left stockade. The expedition to Siyáhi Devi was completely successful. The detachment passing through the valley of the Ulabagar ascended the mountain from the village of Súri, and established itself at the temple on the summit in the course of the day, and it was not till noon that the Gorkhális discovered that they had been outflanked. Early on the morning of the following day, the 24th March, the Gorkhális fearing for the safety of Almora hastily abandoned their stockades, to which they set fire and retreated in great haste along the Ryúni and Katármal ridge to Almora. The extreme difficulty of the country made it impossible for the British force to advance by the Siyáhi Devi route, nor would there have been any chance of their reaching Almora after the abandonment of the position at Kumpur in time to intercept the Gorkhális. Lieutenant-Colonel Gardner therefore decided upon proceeding by the road which the enemy had taken and on which no obstacles now remained. He immediately followed the retreating force, but was unable to march with equal rapidity, and reached Ryúni only on the 26th. Eight hundred men were left at Siyáhi Devi, and the rest of the detachment was recalled to head-quarters. On the 27th, the force halted at Ryúni in order to bring up the guns and baggage which had fallen behind, and on the following day it marched to Katármal, a temple dedicated to the Sun on the ridge immediately above Hawalbágh and the Kosi, and distant only about seven miles from Almora. A party of Gorkhális which had been posted at Katármal retreated on our approach, and the enemy withdrawing to the left bank of the Kosi now concentrated his forces on the Sitoli ridge, above Hawalbágh and about two miles from Almora.

Advance on Almora.

Nothing could have been more judicious than the manner in which Lieutenant-Colonel Gardner had carried on the whole of his operations. It must however be admitted that the success of the British was brought about more by the weakness of the enemy than by any skill and courage of their own. There are no means of discovering the amount of the force which the Gorkhális were able to bring against us in Kumaón, but it is probable that the number of men actually opposed to us never exceeded 1,500, and of these not much more than half were true Gorkhális. By the time that Lieutenant-Colonel Gardner was fairly established in the hills the greater part of the natives of Kumaon in the service of Nepál had deserted, and this loss it was quite impossible to supply by new levies. The greatest source of weakness to the Gorkháli cause was the universal disaffection of the people of the country. Nothing could exceed the hatred which the tyranny and exactions of twenty-five years past had created, and no sooner had the British forces entered the hills than the inhabitants began to join our camp and bring in supplies of provisions for the troops. The same causes made it easy for us to obtain information regarding every movement of the enemy and gave us every facility for obtaining a knowledge of the localities of this country—a knowledge which in mountain warfare such as this, and in the absence of all trustworthy maps, was almost essential to success. We thus possessed every advantage which an invading force could desire, and the Gorkháli chiefs appear to have been devoid of the ability and energy which might have helped them, as it had helped others of their nation elsewhere, to withstand the adverse circumstances under which they were placed.

Aid from the people.

Harak Deb Joshi was one of the main instruments by which the people of the country were persuaded to join us. His influence was still great, and he gave the whole of it without reserve to support the plans of the British Government. After the abandonment by the Gorkhális of their position at Kumpur and the advance of the British force to Katármal, the natives of the province who were employed in the Gorkháli service began to desert in great numbers. Many of them returned to their homes, and more than three hundred soldiers, including several sardárs of some importance, joined us and were incorporated in our force before the end of

March. After these desertions it is probable that the whole available force of the Gorkhális for the defence of Almora did not amount to one thousand men.

Captain Hearsey's operations.

Whilst these events were passing in Central Kumaon Captain Hearsey was invading the province on its eastern side, and his operations were at first attended with equal success, though their termination was disastrous. He left Pilibhít with a force under his command consisting of about 1,500 men early in February and arrived at Bilhari on the 13th, the same day that Lieutenant-Colonel Gardner's force occupied Chilkiya. Bilhari was the first important mart below the hills on the route from eastern Kumaon to the plains just as Chilkiya was the first important town below the hills on the route from western Kumaon by the Kosi. At Bilhari Captain Hearsey made a halt and distributed the proclamations and invitations that he had received from Harak Deb amongst the inhabitants of Káli Kumaon, with the result that in a few days over one hundred Kumáonis entered zealously into the service of the British Government and informed Captain Hearsey that the garrisons of the Timla forts were inclined to quit those places. At Barmdeo, the river Káli leaves the mountains and enters the plain of Rohilkhand. The route up the valley is circuitous and difficult, and the easiest paths into Káli Kumaon strike northwards across the range of hills that immediately overhang the plains, and which do not here reach any very great elevation. The small forts of Timla are situated on this range at a height of 3,840 feet above the sea, and they commanded the route which Captain Hearsey determined to follow.[1] On the night of the 17th February, as soon as he was able to send on sufficient supplies on camels and ponies, he despatched a force of irregulars who, on the 18th, took possession of the two small forts and the pass called Kailaghát. The enemy retreated by Amkharak towards Katolgarh and leaving a small garrison in Timla, the irregulars followed in pursuit. The next day, a second detachment accompanied by 150 hill-men armed with matchlocks and supplies sufficient for a week's march arrived at Timla and pushing on across the ridge descended into the valley of the Ladhiya, where they joined the first detachment. The force now under the command of Bahádur

[1] To Hon'ble E. Gardner, dated 19th February, 1st and 18th March, 1815.

Singh, Subahdár of the fourth company and an experienced partisan leader, consisted of some 500 irregulars with 200 Kumáoni matchlockmen, with whom he crossed the Kánadeo ridge and reached Champáwat, the ancient capital of Kumaon, on the 28th February. Captain Hearsey attributes the success of this expedition to the exertions of the Kumáoni levies. Kálidhar, the Gorkháli Subahdar, made some show of resistance at Barapípal near Barauli, where he had formed a stockade, but this was turned by Bahádur Singh on the 26th and the enemy fled to Katolgarh, leaving a few goats and sheep and their baggage behind. Bahádur Singh followed closely, but the Gorkháli leader with 100 men was able to occupy the fort before the levies came up and invested it. All the Kumáonis in the Gorkháli force joined our party and Captain Hearsey was thus enabled to leave 500 men at Bilhari as a precautionary measure to watch Hastidal, who threatened to cross the Sárda.

Defeat of Captain Hearsey at Khilpati.

It had been proposed that Captain Hearsey, after destroying the bridges, and posting detachments to watch the Káli and prevent the passage of Gorkháli reinforcements from Doti, should march on Almora and combine his operations with those of Lieutenant-Colonel Gardner. It became, however, impossible to carry this plan into effect, for information[1] was received that the Gorkhális were about to make a serious attempt to relieve Almora, and that preparations were being made in the neighbouring Nepálese provinces of Doti and Achám to send a force across the Káli under Hastidal, the brother of Bam Sáh and an officer of great reputation. It was necessary, therefore, that all Captain Hearsey's endeavours should be directed to prevent succour reaching Almora. To create a diversion and prevent if possible Hastidal from leaving Doti, the scheme which had been entertained and which has been already noticed, of sending the ex-Raja, Prithipat Sáh, into that province with a body of irregular troops, was revived[2] and a new levy of five hundred men under one Amán Khán was ordered with this intention. On the 14th March, a strong party of Gorkhális attacked a detachment

[1] Captain Hearsey reported his arrival at Champáwat on the 13th March, and detailing the difficulties that he had to encounter pointed out that Hastidal could at any time cross the Sárda and commence operations in Kumaon.
[2] From Government, 23rd March, 1815. Prithipat Sáh was eventually pensioned by our Government. To, dated 12th August, 1815.

of our force which Captain Hearsey had left at Barmdeo, but were repulsed at all points and were compelled to retreat across the river with considerable loss. Our party suffered severely in this action. Prithipat Sáh, who with his younger brother Jagjít Sáh had joined the force, was wounded and obliged to return to Pilibhít and his uncle was killed. The levies were in the meantime being made with difficulty and, owing to the absence of Prithipat Sáh, the expedition was at last countermanded, and this diversion was consequently never carried into effect. The force under Captain Hearsey was employed during the month of March in watching the Káli, in the hope of preventing the passage of Hastidal, and in the unsuccessful siege of Katolgarh, a fort, a few miles to the north-west of Champáwat. On the 31st March, Hastidal succeeded in crossing the Káli at Kusm ghát about twenty miles east of Champáwat. Captain Hearsey, in his endeavours to watch the Káli and to prevent the passage of the Gorkhális, had so broken up his force into separate detachments, that it was impossible for him to concentrate immediately the means which he had for resisting the progress of Hastidal. He marched, however, with what force he could muster, and was met by the enemy near Khilpati, about five miles to the north-east of Champáwat. His men made hardly an attempt to withstand the attack of the Gorkhális, whose victory was immediate and complete, and Captain Hearsey was himself wounded and taken prisoner. The remains of the force fled to the plains, and thus ended the attack on Káli Kumaon. Captain Hearsey attributed his disaster in some measure to the treachery of the Phartiyál party in Káli Kumaon,[1] and the Márás always declare that the information and assistance which the Phartiyáls gave to Hastidal had an important effect in bringing about the defeat of the British force. There is no doubt that the Phartiyál party were suspicious of our intentions and jealous of the influence of Harak Deb Joshi, the chief of the opposite faction; but the real cause of Captain Hearsey's defeat was the superior courage of the Gorkháli soldiers, which no zeal for his success on the part of the people of the country could have enabled him to withstand. It was before mentioned that early in February a force of five hundred men had

[1] Letter from Captain Hearsey to Hon'ble E. Gardner, dated 14th June, 1815, mentioning Bhana Kulatia, resident of a village near Champáwat, as their chief.

been sent from Káshipur with orders to enter the hills from Rudrpur by Bhamauri and Bhím Tál. No active operations were however undertaken in this quarter, and the only results were the occupation of the petty fort of Barakheri at the foot of the hills, and that of Chhakháta Garhi near Bhím Tál on the 1st April, after it had been abandoned by the enemy.

Gardner's levies reinforced.

The defeat of Captain Hearsey was first announced on the 6th April to the main body under Lieutenant-Colonel Gardner by a *feu-de-joie* from the ramparts of the fort of Lálmandi at Almora,[1] and on the following day Bam Sáh wrote to the British commander that Captain Hearsey was wounded and a prisoner, but that he might rest assured that the prisoner would receive every care and attention at the hands of his captors. This untoward result of the expedition to Champáwat might have been attended with most serious consequences, for although the actual numbers of the reinforcement brought into Kumaon from Doti probably did not exceed a few hundred men, little dependence could have been placed on the raw levies under Lieutenant-Colonel Gardner had they been vigorously attacked by even a small body of Gorkhális, elated by success and under the command of an officer of acknowledged bravery and enterprize like Hastidal. But fortunately for the progress of the operations so happily commenced, efficient succour was on its way, for Lord Hastings on receiving intelligence of the important advantages that had been gained by the force under Lieutenant-Colonel Gardner, perceiving the immense influence which the complete occupation of Kumaon would have on the fate of the campaign, determined to lose no time in sending a body of regular troops to complete what had been so well begun. "The state of operations," says[2] Prinsep, "before Jaithak, combined with the assurance that the tranquillity of Central India would not be disturbed this season, were the circumstances that enabled the Governor-General to devote the troops of his regular army to this service now ; though two months earlier

[1] On the 7th April, Lieutenant-Colonel Gardner received a report from Lieutenant and Adjutant Martindale of the defeat of Captain Hearsey's force at Khilpati on the 2nd April. This officer also reported that he had only 300 men with him and that he intended to retire on Champáwat, but the same day his force was attacked by Hastidal and dispersed with great loss. From Government, dated 20th April. [2] Prinsep, Volume I., No 151, Government to Hon'ble E. Gardner, dated 2nd April, 1815, detailing the instructions given to Colonel Nicolls.

he had not deemed it safe to spare them." The force assembled to support Lieutenant-Colonel Gardner was composed of 2,025 men, consisting of the 1st Battalion, 4th Regiment Native Infantry, under Captain Faithful (761 men); the 2nd Battalion, 5th Regiment Native Infantry, under Major Patton (764), and a detachment of the 15th Regiment Native Infantry then employed in Garhwál (500), with twelve guns,[1] and the whole was placed on the 23rd March under the command of Colonel Nicolls of Her Majesty's 14th Foot, Quarter-Master-General of Her Majesty's troops in India.[2] Early in April Colonel Nicolls entered the hills, and following the same route which had been taken by Lieutenant-Colonel Gardner, he joined the force at Katármal on the 8th April without meeting any opposition on the way.

Colonel Nicolls commands.

Colonel Nicolls now assumed the command of the whole of the invading force, both regular and irregular, the superintendence of the civil affairs of the province and the direction of the diplomatic transactions with the Gorkháli authorities remaining as before with Mr. E. Gardner. The Gorkhális at Almora had now been joined by Hastidal and the force which he had brought with him from Doti. But, notwithstanding the arrival of Hastidal, the capture of Almora and the occupation of the province had now become a matter of certainty, for the means of the Gorkhális were utterly insufficient to contend against the large force of regular troops which was now arrayed against them. They were already reduced to great difficulties from scarcity of supplies at Almora, and the garrison, who had received no pay for a long time past, could only supply themselves with food by plundering the adjacent villages. A great part of the inhabitants of the town abandoned it and fled into more quiet parts of the country. Some letters[3] from the principal Gorkháli officers at Almora to Nepál, which were intercepted in the beginning of April, give us an idea of the difficulties to which the garrison was reduced. These simple and straightforward letters, free from all boasting and oriental exaggeration, elicited from Lord Hastings an expression of well-merited respect for "their spirit of patriotic zeal and devotion."

[1] Two 12-pounders, six 6-pounders, two 4½-inch mortars and two 8-inch mortars. [2] Afterwards Sir Jasper Nicolls and Commander-in-Chief in India.
[3] See Appendix A. and from Govt., dated 25th April, 1815.

Various attempts at negociation had been made by the Chauntra Bam Sáh, but his proposals were of so vague a nature that it appeared that his only object was to gain time, and they led to no result. That our officers had correctly interpreted the intentions of the enemy was afterwards shown,[1] for from the day that intelligence was received by them of the despatch of Colonel Nicolls' force, letters were sent to Nepál asking for reinforcements, and on the 4th May, eight companies of Gorkhális (numbering 633 men) were actually despatched from Kathmándu towards Almora and a promise was given that others should soon follow. This tardy compliance with the requisitions of the Gorkháli commanders in Kumaon was of little use, for long before the reinforcements had reached the Káli, Almora had fallen and the Gorkhális had retired across that river. Abandoned almost by those to whom he looked for support, Bam Sáh saw the necessity for making some movement in Kumaon itself, and early on the morning of the 22nd April, up to which time no further military operations had been undertaken on either side, Hastidal marched with a strong detachment from Almora in a northerly direction. It has been generally supposed that the object of the Gorkhális in this movement was to turn the left of the British position and to endeavour by a sudden attack to recover the ground that had been lost. It appears, however, from a letter written by Bam Sáh and the other principal Gorkháli officers to Amar Singh Thápa after the fall of Almora, the sincerity of which there is no reason to doubt, that Hastidal had no such bold intentions, and that this movement was undertaken only with the object of keeping open the Gorkháli communications with the northern parganahs of the district. Having now lost their hold of the country between Almora and the plains, it was a matter of importance to the Nepálese Government, as well as to the Gorkháli forces operating in Kumaon, that their communications to the north should not be disturbed, for it was by this route only that they could correspond with their detachments in western Kumaon and Garhwál and with the seat of war on the right bank of the Ganges. But in the desperate state of the Gorkháli affairs at Almora the movement was a very unwise one, and although it would undoubtedly have been impossible for the enemy under any

Action at Gananáth.

[1] To Mr. Gardner, dated 17th May, 1815.

circumstances to have delayed the fall of Almora much longe the result of this expedition greatly helped to accelerate that event. Hastidal directed his march over the Kalmatiya range towards Gananáth, a mountain about fifteen miles north of Almora between the valleys of the Kosi and the Sarju, intending apparently to hold a position there, by help of which a communication could be maintained round the left of the British army posted at Hawalbágh. The Gorkhális had been anxious to keep this movement secret, but the favourable disposition towards us of the people of the country gave us such facilities for obtaining information that all concealment was impossible, and Colonel Nicolls was aware of what had occurred very soon after Hastidal had left Almora. He, at once, despatched a strong party of irregulars under Captain Butterfield to the western parganahs, to induce confidence and obtain supplies and to counteract the manœuvre of Hastidal. Major Patton was detached on the same evening (22nd April) with seven companies of the 5th Native Infantry and five flank companies under Captain Leys, and a body of irregulars altogether amounting to nine hundred men with a six-pounder and a mortar, and was sent up the Kosi from Katármal to watch and if possible attack the force under Hastidal. The Gorkhális reached Gananáth the day after they left Almora, but before they could properly establish themselves there they were attacked by the British. The first part of the ascent to Gananáth is steep, but the upper parts of the mountain slope down gently in broad grassy lawns, with more level ground than we commonly find on the rugged ridges of the Himálaya. A little to the south of the temple of Gananáth, in one of the beautiful turfy glades among the pine-groves, the Gorkháli and the British forces met on the evening of the 23rd April. The contest was a short one. Hastidal was killed by a musket ball in the temple and his fall was the signal for the flight of the Gorkhális. Our loss in this brilliant action was only two sepoys killed and Ensign Blair and twenty-five sepoys wounded.[1] The enemy lost both Hastidal and Jairokha Sardár and thirty-two sepoys killed, whilst the number of the wounded is unknown, for many of them perished on their way back to Almora and many others dispersed and never reached that place. The British, leaving a small detachment at Gananáth,

[1] To C. in C., 24th April, 1875.

returned the next day to Katármal. "In Hastidal Chaun!ra," writes Mr. J. B. Fraser, "the enemy lost a most valuable active and enterprising officer and a man whose character was particularly amiable. He was uncle to the reigning prince of Nepál and his talents and virtues were worthy of his high descent. With the sentiments which a brave man ever entertains for a noble and worthy enemy, Colonel Nicolls, in his official despatch, paid a most handsome and feeling tribute to his memory."

Attack on Almora.

Colonel Nicolls seemed determined to lose no time in following up his success, which the death of Hastidal rendered a very important one, and on the 25th April he put his troops in motion to attack Almora. The main body of the Gorkhális, under the command of Angat Sirdár, was stationed a little above the village of Pándekhola on the ridge called Sitoli, about two miles west of Almora between the town and the Kosi; a detachment under Chámu Bhandári was posted on the Kalmatiya hill to protect the right flank of the position; and the remainder of their force was stationed at Almora under the command of the Chauntra Bam Sáh himself. At one P. M. on the 25th April Colonel Nicolls moved with the greater part of his force against the Sitoli position, where the Gorkhális had thrown up breast-works and stockades. Colonel Nicolls had intended to establish a battery within range of the first stockade and had taken up ground for the purpose, but seeing his men confident and ready for the attack, he ordered the two first stockades to be taken by assault which was well carried out by Captain Faithful and the first battalion of the 4th Native Infantry. The irregular infantry under Lieutenant-Colonel Gardner then advanced by a parallel ridge and diverging near the summit easily possessed themselves of the three remaining breast-works on the Sitoli ridge. In the meantime, fifty men of the 4th Regiment occupied a small breast-work on the left and the entire regiment eventually halted on the ridge itself, whilst Captain Leys with the flank battalion pursued the retreating enemy. Finding five different roads, the British advanced along each until they possessed the stockade leading to Kalmatiya and thus cut off all communications of the enemy in that quarter. The Gorkhális fought with their usual determination and courage, but they were driven from every point

and compelled to retreat into the town of Almora, followed closely by the British force. Colonel Nicolls established his head-quarters for the night at Pokharkhâli about half a mile north of the fort of Almora, and the troops were encamped close to the town, and on the hill called Haridungari above Pokharkhâli. About 11 P.M. in the same night, the enemy made a vigorous attempt to recover the ground he had lost. The detachment posted on Kalmatiya[1] under the command of Châmu Bhandâri descended from the ridge and attacked the British position on the north, while at the same time the garrison of Lâlmandi hearing the noise of musketry made a sortie from Almora on the opposite side. The attack on the north was at first successful. The Gorkhâlis carried our most northern post, though stockaded and held by Lieutenant Costly and a detachment of the 4th Native Infantry. One hundred men of the flank battalion of the same regiment under the command of Lieutenants Brown and Winfield were instantly despatched to the assistance of the party, and Lieutenant-Colonel Gardner, who happened to be with Colonel Nicolls at the time, led in person a company of his irregulars to the spot. By the promptness and gallantry of the supports the position was recovered, and though the Gorkhâlis again charged our troops two or three times, they were always repulsed. The loss on both sides during this conflict was very considerable, for the enemy came on with great determination and was only defeated after a hard struggle. During this time the sortie from the Almora side took place and a violent attack was made upon our most advanced position in that quarter. The enemy came up to the very wall of the stockade, which they attempted to cross, though it was nearly six feet high; the one or two who succeeded, however, fell dead within. These assaults and skirmishes continued during the whole night, occasioning great loss on both sides and on the British side the death of a promising young officer, Lieutenant Taply.

Almora taken.

Natives of Kumaon who were present at the time declare however, and very probably with truth, that a considerable part of our loss on the occasion was caused by the fire of our own men, in the confusion which was caused by the first successful attack of the Gorkhâlis. Our loss in killed and wounded on the 25th amounted altogether to two hundred

[1] Commonly called by the European community of Almora, Kalimath.

and eleven men.[1] The next morning, the advanced post was pushed forward to within seventy yards of the fort of Almora and the mortar batteries which had been placed in position during the night shelled the enceinte with such good effect that numbers of the garrison could be seen leaving the fort by a wicket on its eastern side. The advanced post considered too easily that the fort had been evacuated and endeavoured to enter by the same door, but were met by the garrison, who obliged them to retreat. The artillery fire was continued until about 9 A.M., when the Chauntra sent a letter under a flag of truce, supported by a letter from Captain Hearsey, requesting a suspension of hostilities and offering to treat for the evacuation of the province on the basis of the terms offered to the Chauntra several weeks previously by Mr. Gardner. Lieutenant-Colonel Gardner was deputed to hold a personal conference with Bam Sáh, and on the following day the negociation was brought to a close by the conclusion of a convention under which the Gorkhális agreed to evacuate the province and all its fortified places. It was stipulated that they should be allowed to retire across the Káli with their guns, arms, military stores, and private property, the British providing them with the necessary supplies and carriage.

The convention for the evacuation and surrender of Kumaon was signed at Almora on the 27th April, 1815 by the Hon'ble E. Gardner, Bam Sáh, Chámu Bhandári and Jasmadan Thápa, and as a pledge for the due fulfilment of the conditions, the fort of Lálmandi, erected on the site now occupied by fort Moira, was, the same day, surrendered to the British under a royal salute and Captain Hearsey was released. The officers in command of the several Gorkháli detachments in Kumaon and Garhwál who were under the authority of Bam Sáh were ordered to give up their posts. On the 25th April, Bam Sáh and his Sardárs paid a complimentary visit to Mr. Gardner and Colonel Nicolls and were received in Colonel Nicolls' tent under a salute of nineteen guns. The visit was returned the next day and the same evening Jasmadan Thápa, on the part of Bam Sáh, came with an open letter requesting

[1] On this point exact information is not obtainable as the whole of the military correspondence and records of the period belonging to the station staff office at Almora were about ten years ago burned as waste paper—a fate which is gradually overtaking all the records in the country that are at all worth preservation. See further Fraser's Journal, p. 46, and Prinsep's Transactions, I., 156.

that it might be forwarded to Amar Singh Thápa, Ranjor Singh and the other Sardárs at Jaithak and Náhan, against whom General Ochterlony was then acting, informing them of the events that had taken place in Kumaun and advising them to endeavour to obtain for themselves similar conditions and to withdraw their forces from the western hills to the east of the Káli. The letter[1] was signed by Bam Sáh and the other Gorkháli leaders at Almora and is so interesting as containing the Gorkháli account of the war that I give it here in full:—

"On the 22nd an action was fought on Gananáth ká dandá. Hastidal and Jairokha Kázi with nine sepoys were killed; others were wounded. The enemy lost a captain and some men. The enemy's force was at Katármal with detachments at Siáhi Devi and Dhamus; 2,500 men were in a stockade on the Fathpur hill and our communications with Bágeswar were threatened. So I sent my brother Hastidal to Gananáth. By his death and that of Jairokha the enemy acquired confidence, but I disposed of the troops to the best advantage. On Tuesday the 25th the enemy, consisting of the Europeans in front followed by the battalions, the mortars on eight elephants, advanced in succession to the assault of Sitoli. Intimation was sent me by Captain Angat. So I sent the Bhawáni Bakhs' company, with the exception of a single *patti* for my own protection, to his support. I was unable to send more without weakening Rangelú's post at Lálmandi and Charu Lekh. Our men were unable to withstand their volleys of 1,000 musketry and were obliged to abandon their defences. Nar Sáh Chauntra with a supply of ammunition proceeded in another direction and exerted himself to the utmost; but for one musket of mine twenty of theirs rained showers of bullets upon us: it was impossible to withstand their fire.

The enemy pursued us into the town. I then determined to defend the forts of Lálmandi and Nanda Devi. In the meantime the officers and Captain Angat in a litter arrived by the lower road. I ordered a charge of 30 men sword in hand, but the enemy took post in the temple of Dip Chand and kept up an incessant fire of shells upon the fort. I ordered Bhandári Kázi to collect the force on Kalmatiya and make an attack at night on the hill above Mátal Devi called Haridúngari; in this affair the enemy had a lieutenant and 98 men killed and we gained the position, though with the loss of Subahdár Zabar Adhikári and Mastrám Thápa. About 20 minutes after, a battalion under Lieutenant-Colonel Gardner and other Europeans arrived and renewed the action and Sirdár Ransúr Karki with jamadárs, and 45 gallant gentlemen, were killed and scarcely any escaped unwounded on either side. Colonel Gardner and Colonel Nicolls' brother were wounded. I ordered reinforcements to advance under Jasmadan Thápa, but some of the men ran away and others showed symptoms of following, so the reinforcement did not advance. The firing continued all night. In the morning the remains of the Bhandári's force retired to Sintoli and the enemy returned

[1] It was forwarded to General Ochterlony, who communicated its contents to the Gorkháli leader at Malaun. Government to Ochterlony, dated 12th May, 1815.

towards the fort, recommencing a brisk fire from the trenches which was maintained for six hours on both sides, but with the addition of stones on ours. The mortars never ceased firing an instant night and day, and men and women and animals were exposed to the fire. Captain Hearsey advised us to carry off the magazine and effects of the Raja. I replied that if anything could be saved it would be well, and I requested him to apply for a cessation of hostilities. In the meantime, I sent to Chámu Bhandári, and we four had a consultation on the state of affairs. We considered that we had a large stock of ammunition here, but the soldiers of the levies were altogether useless, and when those you have cherished betray you in the season of distress, what is to be done? The genuine Gorkhális alone proved themselves of service, and the Barádars (chiefs) only were to be depended on. On this I reflected that we ought not to suffer the power and wealth of our master to be reduced or dispersed, and determined on sending to Mr. Gardner and having a conference. On inquiry of Mr. Gardner what were the causes of the present quarrel, he replied that the murder of the Tahsíldár in Bútwal had given deep offence to the Governor-General, on which account he had made immense preparations. At present he anticipated no benefit from a reconciliation with us, but if our differences can be adjusted on certain conditions, it is well. 'Retire beyond the Káli and write to your Government to request that an accredited agent may be sent with full powers to the Governor-General.' I have accordingly written and matters are now in train of adjustment and now friendly intercourse is established between the English and Gorkhális. Do you therefore retire from the west with your army. We are going to the eastern side of the Káli, and you ought to put an end to the war and conclude terms of peace with General Ochterlony. Bring your army and military stores with you. We will then in conjunction address our Government, recommending that a vakíl be sent to the Governor-General to settle the business."

A proclamation was now issued by Mr. Gardner declaring that the province of Kumaon was attached to the British Provinces, calling on the principal people of the country to repair to Almora, and inviting the inhabitants to return to their homes and to their ordinary occupations.[1] On the 30th April the Gorkhális commenced their march, and on the 14th May they crossed the Káli at Jhúl-ghát into Doti, according to the terms of the agreement that had been entered into. No opposition was offered by any of the Gorkháli detachments in other parts of the province: they were all included in the convention entered into by Bam Sáh, and most of them followed him into Doti. The two principal posts which the Gorkhális had possessed in western Kumaon were the forts of Naithána, in Páli, on the left bank of the Rámganga; and Lohba twelve miles further north, a little within the border of Garhwál. In

Mr. Gardner has civil charge.

[1] From Government, dated 3rd May, 1815.

each of these forts there were about one hundred and fifty men. Naithána was evacuated after the fall of Almora before any special demand had been made for its surrender. Lohba was reduced by the people of the country, who had been supplied with ammunition by Mr. Gardner. They succeeded in cutting off the water of the garrison, and compelled it to evacuate the fort on the 22nd of April, four days before the fall of Almora. The Gorkhális attributed the insurrection of the districts near Lohba to the influence of Harak Deb Joshi. This was the only quarter where the inhabitants took any very active means to expel the Gorkhális, although they were everywhere most anxious for the success of the British enterprise. No resistance was offered by any of the Gorkháli detachments in Garhwál, and the whole of that district fell into our hands without the slightest opposition after the fall of Almora. A force marched to Srinagar from the west, after the settlement of affairs in that quarter, but nothing occurred which called for any military operations or which demands any more particular notice here. The Hon'ble E. Gardner was directed by the Governor-General to assume the office and title of Commissioner for the affairs of Kumaon and Agent to the Governor-General on the 3rd of May, 1815, and Mr. G. W. Traill was appointed his assistant on the 8th July. Colonel Nicolls with a force, accompanied by Mr. Gardner, proceeded to Champáwat immediately after Bam Sáh commenced his march, and in that place Mr. Gardner turned his attention to civil affairs. The treaty by which Kumaon was ceded to the British was not, however, concluded till the 2nd December, 1815, and was not ratified until the 4th March, 1816.

Peace with Nepál.

During the interval between the fall of Almora and the ratification of the treaty with Nepál the Káli river formed the eastern boundary. In the meantime Mr. Gardner was instructed to inquire whether the acceptance of this boundary in any future negotiations with Kathmándu would secure the trade with Tibet by the passes across the Himálaya from any interference of the Gorkhális, and should it appear that any frontier beyond the Sárda in the part where it approaches the snowy range should be required for this purpose, the extent of it should be defined, so that its cession might be provided for. Similarly he was to ascertain what extension to the

westward would be advisable with a view to the tranquillity of the new province, so that on the re-establishment of any of the former Rajas, provision might be made for that purpose. Opportunity was also taken of the presence of Bam Sáh in Doti to ascertain the views of the Nepálese Darbár with regard to peace. As has been shown already, he belonged to the peace party, which was opposed to the war party, headed by the Thápas, but had not joined in the invitation given by the ruler of Nepál to Guru Gajráj Misr to proceed to Kathmándu with a view of opening a negotiation for peace with the British authorities. Mr. Gardner was informed that should the Nepálese Government choose Bam Sáh as their agent to conduct these negotiations, Lord Hastings would intrust to him the delicate task of representing the British. Lieutenant-Colonel Gardner had accompanied the Gorkhális on their march into Doti as far as Jhúl ghát, and he confirmed the account of the disposition of Bam Sáh and the anxiety felt by him that he should be the means of communication between the court of Nepál and the British. Bam Sáh urged that if the negotiations fell into the hands of the Khasiyas, as the Thápas were termed, not only could there be no real peace, but that death or exile awaited him and all others who belonged to the party of the Raja.[1] The correspondence shows that the British were inclined to afford to Bam Sáh and the party he represented all the support they could derive from a knowledge of the favourable disposition of our Government towards them, and that should it be necessary for them to occupy Doti for themselves, they might rely on our assistance and co-operation. The expediency of limiting our direct support, in the first instance to the assurance of our entire sympathy with the party, was based on the belief that any other mode of rendering that support would be inconsistent with general principles of policy and could not conduce to the attainment of the particular object in view. A public declaration to the Gorkháli Government of our desire to negotiate with Bam Sáh, to the exclusion of any other agent, would naturally excite suspicion of a secret understanding with him founded on his presumed readiness to make greater sacrifices of the interests of his Government in order to conciliate our good will than any other individual or party. A very

[1] To Mr. Gardner, dated 17th, 19th, and 21st May, and from him dated 8th June, 1815, after a personal interview with Bam Sáh on these matters.

powerful and plausible handle would thus have been given to his enemies for preventing him getting the negotiations into his hands, and should they succeed, we should not only have unnecessarily excited their opposition and ill-will but have made Bam Sáh's position extremely dangerous. The knowledge obtained by Bam Sáh of our real disposition would enable him and his adherents to take advantage of the circumstance in disposing the Raja to emancipate himself from the Thápas, who by their violent measures had brought on the war, and to seek the aid of his own near relatives, whose pacific counsels would have averted the war and might yet save his Government from ruin.

As to the occupation of Doti by Bam Sáh the British had no hesitation in offering their assistance. So long as hostilities continued between the two states, it was right to use every effort to reduce the means and circumscribe the territories of the Gorkhális and to support a rebellion in Doti was perfectly consistent with the acknowledged principles of public honor and the practice of belligerent states. But it was distinctly stated that it was for Bam Sáh himself to consider whether, by taking this step, he promoted his own security and increased his chance of recovering his ascendancy in Nepál. So far as British interests were concerned, the presence of an independent state on our eastern frontier ruled by a chief well disposed towards us and necessarily relying upon us for support would have been eminently advantageous. Accordingly Mr. Gardner was instructed to convey to Bam Sáh the assurance that it would afford the greatest gratification to the British if he were empowered by the Raja to conclude terms of peace, and that in the event of his finding it necessary to break with the Darbár to secure himself from persons seeking his destruction or to oppose the usurping faction who were ruining the states for their own selfish purposes, he might rely on the aid of the British Government, who would guarantee to him and to his family the independent sovereignty of Doti and any other territory which he might acquire, and promise was given that provision should be made for this purpose in any treaty entered into with Nepál. At the same time it was to be clearly understood that the views of Bam Sáh should primarily be directed towards concluding a peace, and that when pledging our assistance towards maintaining him in Doti,

it was not to be done so as to tempt him, by the opportunity of acquiring an independent sovereignty, into conduct contrary to his duty to his prince and country. His seizure of Doti would doubtless cause a continuance of the war which, whilst ruinous to Nepál, would also prove inconvenient to British interests. The offer of assistance in conquering Doti was therefore made in such a way as to render it less preferable than aid in resisting the machinations of the Thápa party and restoring the influence of the Raja by promoting peace, but was still held out as an ultimate resource should occasion arise.

Gajráj Misr.

Gajráj Misr, the guru of the late Raja Ran Bahádur Sáh, was at this time at Benares and was invited by the reigning Raja and Bhím Sen Thápa to Nepál. During the time of his influence he was always favourable to the British connection and was employed in the negotiations conducted both by Major-General Kirkpatrick and Lieutenant-Colonel Knox and had always professed his desire and ability to conclude terms of peace and accomplish the subversion or at least the limitation of the power of the Thápas. With these designs he proceeded to Kathmándu, after being apprised generally of the terms on which peace would be granted. As there was reason to think that the views of this person and those of Bam Sáh were, in the main, the same, it was suggested to the latter that it would be well if they could unite their interests for the promotion of their mutual advantage.

Operations to the west of the Jumna.

On the 15th May, 1815, Amar Singh Thápa surrendered to General Ochterlony, and I shall now complete the brief account of the campaign in the western hills. In Bahar and Gorakhpur nothing new was attempted, and it is therefore only necessary to refer to the operations before Jaithak and Náhan. After the unsuccessful attack on Jaithak of the 27th December, General Maftindell, notwithstanding the immense numerical superiority of his force, made no further attempts worth recounting to dislodge the enemy. Miserable vacillation and utter want of all enterprise or judgment constitute the history of the siege of Jaithak. At the end of March it was determined to blockade the place, but it held out until its fall was brought about by the successful operations of General Ochterlony,

of which some account must now be given. It has already been stated that Amar Singh had been compelled towards the end of January to establish himself in the fortified position of Malaun, and to concentrate there the greater part of his forces. But, notwithstanding the indefatigable exertions of General Ochterlony and his officers, it was not until the middle of April that after all the detached forts had been reduced, in which Amar Singh had left small garrisons, the final preparations could be made for the attack on Malaun itself. On the 15th April General Ochterlony ordered an attack to be made on Deothal, a high point within the enemy's position. After a desperate struggle, which was renewed on the following day, Deothal remained in the possession of the British. We lost in these operations seven officers and three hundred and forty-seven men killed and wounded. The loss of the Gorkhális on the second day alone was said to have exceeded five hundred men, and among them was Bhakti Thápa, one of their most distinguished officers. A road by which heavy guns could be transported to Deothal was now constructed, and batteries were raised against Malaun itself.

But it had now become evident to all that the Gorkhális must very soon cease to offer any further resistance to the progress of the British arms. The occupation of Kumaon had cut off all hope of relief and had made retreat impossible, even if the vigilance and the superior forces of General Ochterlony could have been evaded, and most of the Gorkháli Sardárs were desirous of making terms before it was too late. But Amar Singh refused to listen to any proposals of accommodation. There was little subordination of rank in the Gorkháli army and most of the superior officers abandoned Malaun with their men, leaving Amar Singh to the fate which he seemed determined to suffer. At last, when he had only two hundred men remaining, he agreed to the terms that had been offered by the British General, and on the 15th of May, he signed a convention agreeing to deliver up the forts of Malaun and Jaithak and the whole country between Kumaon and the Satlaj. The Gorkháli troops were permitted to march through the plains to the east of the Káli, retaining their private property, but without arms. An exception to this last stipulation was made in favor of the small force under Amar Singh's personal command,

who, "in consideration," to use the words of the convention,[1] "of the high rank and character of Kázi Amar Singh Thápa, and of the skill, bravery and fidelity with which he has defended the country committed to his charge," were permitted to march out with their arms and accoutrements, their colours, and two guns. A similar favour was granted to two hundren men under Ranjor Singh, the brave defender of Jaithak. "Thus," writes Prinsep, "the campaign, which in January promised nothing but disaster, finished in May by leaving in the possession of the British the whole tract of hills from the Ghágra to the Satlaj."

Negotiation for peace.

We shall now briefly sketch the progress of the negotiations which ultimately led to peace with Nepál, and perhaps no better example could be had of the intricate nature of diplomatic communications in the East than the volumes of correspondence on this subject disclose. In order to prepare Mr. Gardner for the possibility of his being intrusted with powers to negotiate a peace through Bam Sáh, a draft treaty was transmitted to him with the instructions of Government, which were, briefly, the renunciation of all the points in dispute between the two Governments antecedent to the war, the cession of territory as an indemnification for the expenses of the war and security for all persons who aided the British during the hostilities.[2] Very shortly afterwards[3] information of the arrival of Gajráj Misr in Colonel Bradshaw's camp with power to conclude a treaty on behalf of the Nepálese Government was received, and Mr. Gardner was informed that, however much it was desirous that the negotiations should be concluded through Bam Sáh, it would not be wise for the British Government to refuse to receive an accredited agent apparently authorised to treat with it after so frequently expressing its willingness to come to an understanding. If, therefore, Gajráj Misr's powers and instructions were such as to enable him to make the cessions of territory which the British were entitled and resolved to demand, Lieutenant-

[1] Based on instructions conveyed to General Ochterlony, dated 12th May, 1815.
[2] To Mr. Gardner, dated 25th May, 1815. [3] *Ibid.*, 5th June, and reply, dated 17th June: Bradshaw to Government, dated 28th May, 1815. Gajráj Misr, however, brought no propositions whatever from the Government of Nepál, which left the terms of peace entirely to the generosity of the British Government. They relied still, it would seem, on the hope excited by past forbearance and appeared not to see the necessity for the sacrifice of territory which their violence had provoked the British to exact.

Colonel Bradshaw was authorised to treat with him. At the same time means were taken to insure the safety of Bam Sáh and the security of his interests, and it was still determined to support him in the independent possession of Doti, if he should so resolve under the disappointment of his other views. His decision on this point, too, admitted of no delay, since if peace were once signed, the British could not give open or secret aid to the attempts of any subject of the Nepál State against the interests of that State, and the approach of Amar Singh and the troops from the westward would also preclude any attempt on Doti after their arrival. No choice, therefore, remained to Bam Sáh between an immediate declaration of his independence accompanied by the necessary measures for securing it and a determination to preserve his allegiance to whatever party ruled in Nepál and await the course of events. Authority was given to move a British force into Doti to support Bam Sáh and Mr. Gardner was instructed "not to urge him to the adoption of either measure, but leave him to his free choice, assuring him that, whatever it may be, the British Government would continue to regard him as its friend and well-wisher."

Instructions to Colonel Bradshaw.

Lieutenant-Colonel Paris Bradshaw was also directed to apprise Gajráj Misr fully of the intentions of the British Government, that, amongst other stipulations, it insisted on the Nepál Darbár giving up all claims to the country west of the Káli; further, that the British Government having authorised its agents in the course of the war to enter into engagements with certain chiefs and tribes, subjects of the Government of Nepál, the Raja of Nepál should recognise and respect any treaties and engagements which might have been formed previous to the conclusion of the treaty and the Raja should engage to make any further cession of territory as might be necessary to enable the British Government to fulfil any engagement which its agents might have contracted.[1] This stipulation, though inconvenient and likely to give rise to the apprehension that a compliance with it would bind the Raja to ruinous and unknown concessions, was necessary to provide for the possible

[1] Other stipulations not so closely connected with Kumaon affairs were the cession of the Tarái along the whole line of frontier, the cession of certain lands to the Sikkim Raja, who had aided us, and the reception of a Resident and escort at Kathmándu itself.

event of Bam Sáh's wishing to establish himself in Doti. At the same time it was agreed that a list of the chiefs and tribes referred to should be furnished before the treaty was presented for ratification.

Struggle between parties in Nepál.

In the meantime Bam Sáh declared it possible that Bhím Sen, who then held the principal place amongst the advisers of the Raja of Nepál, would enter into his views and unite with him against the extreme party led by Amar Singh, and in furtherance of a project for this purpose communicated,[1] by his brother Rudrbír Sáh, with Gajráj Misr. The British Government approved of this union, but declined to take any active part in the political struggle between the parties, merely allowing its sympathies to be known. It also expressed again its willingness to treat with any duly accredited agent on the only basis that could be admitted, that it should be in a position to fulfil to the letter its promises to Bam Sáh and his brother if, by being driven to extremities, they should be compelled to seek their safety by throwing off their allegiance to the government of Nepál.[2] Gajráj Misr, however, declared that his authority did not extend to the acceptance of terms like those proposed by Lieutenant-Colonel Bradshaw and negotiations[3] were at once broken off and orders issued not to renew them in the same quarter until Bam Sáh had an opportunity of trying to obtain the management of these affairs in his own hands. Although justly incensed at the tenor of a communication made by Bam Sáh which was calculated to lead the Raja of Nepál to believe that the British Government was encouraging a double negotiation, it was deemed expedient to allow Bam Sáh an opportunity of securing his own position and so relieve the British from the irksome task of supporting him in the occupation of Doti. It is but justice to say that all this time both Bam Sáh and his brother agreed with Mr. Gardner[4] that the seizure of Doti could only be looked upon as a last resource when the lives of themselves and their adherents were in jeopardy, and towards the end of June[5] they formally announced their relinquishment of all designs upon Doti as without

[1] Given in letter of Bradshaw to Government, dated 29th June, 1815.
[2] To Mr. Gardner, dated 15th June, 1815.
[3] *Ibid.*, 27th June, 1815.
[4] To Government, dated 8th and 10th June, 1815.
[5] *Ibid.*, dated 20th, 23rd, 28th June, 1815.

seriously involving their connections now scattered throughout Nepál, they had not the means for taking such a decisive step, and instead thereof they declared their intention, should occasion arise, to seek a refuge in our territory. This decision of the Chauntras relieved the British from considerable embarrassment and removed what was thought to be one of the great impediments to negotiation.

The Nepálese Tarái.

Bam Sáh was now intrusted with powers to negotiate a peace by the Nepál darbár on the basis of the cession of all the country west of the Káli. The Tarái was, however, to be retained, since without it, they averred, the Hill state could not exist. He communicated their views to Mr. Gardner, who assured him that the cession of the Tarái formed an essential part of the only conditions on which the British Government were determined to insist.[1] Bam Sáh again urged that the Tarái was the only valuable part of the Nepál possessions, and that were it given over, the mere hills that remained would not be worth stipulating for. That were this point insisted on by the British Government, a popular war would arise in which every subject of Nepál would engage. Hitherto many of the chief people had kept aloof through party feelings and disapprobation of the war in which the Thápa party had involved them, but no sooner should it be known that we insisted upon the cession of the whole of the Tarái than all party faction would be forgotten in the general cause and every one would unite for the common defence; that, notwithstanding all his obligations to the British Government he would be compelled to resist the cession to the utmost. The feelings of the entire population of Nepál coincided with the views expressed by Bam Sáh, and had we known, as we did know afterwards, that the lowlands were so essential to the prosperity of the hills as a winter pasturage for the cattle and as a place where a second harvest could easily be raised and gathered, there is little doubt but that the concession subsequently made would have now been granted. At the same time it was necessary to inflict some permanent punishment on these people who had, hitherto, considered themselves invincible, and with the imperfect information then procurable it was difficult to estimate accurately the relative importance of the demands made. Negotiations of all kinds were

[1] To Government, 4th to 15th July; from Government, dated 22nd July, 1815.

now broken off, a result that must have been expected as the transfer of the arrangements for peace could only have occurred from a hope that Bam Sáh would be able to obtain better terms than Gajráj Misr. The difficulty now remained that any departure from the terms laid down might be construed into an acknowledgment of weakness and merely provoke further aggression, but even this danger the Government were ready to risk if by so doing a satisfactory peace could be concluded.

Preparations for renewal of war.

The assertion that the Gorkháli chiefs and soldiery were, in a great measure, dependent on the Tarái for a considerable part of their means of support was confirmed from other quarters and their repugnance to the cession of that tract began to be understood. The British Government therefore declared itself disposed to consult, so far as paramount considerations of public interests would admit, the feelings and interests of the chiefs and declared its readiness on the Tarái being absolutely ceded by the Nepálese to assign a limited portion of the lands in *jágír* to a certain number of chiefs to the value of between two or three lakhs of rupees, or grant them pensions in lieu of the land to the same amount. The value of the Tarái formed no part of the considerations which induced the British Government to insist on its cession as a condition precedent to the establishment of peace. During the time that they held it they found its management exceedingly difficult, the population scanty and the climate unhealthy. They, however, hoped that by the complete severance of the interests of the lowland and the hills, there would be no opportunity in future for encroachments and quarrels, such as those that led to the present war, and further directed our officers to limit the demand to the Tarái between the Káli and the Gandak or Saligrám river and whatever portions were actually in our possession at the time. In the meantime, it was thought advisable to prepare for a campaign at the earliest practicable period of the ensuing season and to make every arrangement for conducting it in such a manner as to thoroughly humble the spirit of the enemy. Major-General Ochterlony was appointed to command the force at Dinapur which was eventually intended to invade Nepál itself. Colonel Nicolls was sent[1] to

[1] To Mr. Gardner, dated 20th July, to Government, dated 4th September, 1815, and to Mr. Gardner, dated 10th February, 1816.

prepare for operations against Doti and the Bútwal and Palpa frontier, whilst Lieutenant-Colonel J. W. Adams was given the command of the troops in Kumaon. Stores were collected at different points along the Káli and the local battalions were ordered to hold themselves in readiness for active service. Whilst their preparations were going on Bam Sáh had an interview with Mr. Gardner in September, but as he had no extension of his powers to negotiate nothing was effected. Mr. Gardner informed Bâm Sáh that Gajráj Misr had now obtained fresh and explicit instructions from Nepál and full powers to conclude a treaty on the basis laid down by the British Government,[1] and though the Nepál Government had shown that they had never any serious intention of concluding peace through his agency, the British Government would still regard him as their well-wisher and friend.

Treaty concluded.

The events that followed have little bearing on the history of Kumaon, but a brief sketch is necessary to conclude the history of the war. Although the Gorkhális agreed to yield the Tarái with the exception of the tracts of Baraparsa or Makwánpur, Bijipur and Mahotari Sabotari or Morang and the forests at the foot of the first range of hills, they still opposed the admission of a British Resident at Kathmándu. The unwillingness of the Gorkhális to accede to the sacrifices demanded from them was thus still very apparent, and it was not until the futility of all opposition was clearly shown that the Nepálese at last gave in. Gajráj Misr, on the 2nd December, concluded a treaty with Lieutenant-Colonel Bradashaw, by which nearly the whole of the Tarái, the hill-country to the west of the Káli and the territories to the east of the Mechi which had formerly belonged to the Raja of Sikkim were ceded to the British Government. It was also stipulated that a British regiment should be received at Kathmándu. It had been agreed that the treaty should be ratified by the Raja of Nepál within fifteen days. But before this stipulation could be carried out the party who were still in favour of war, of which Amar Singh Thápa was the leader, obtained the upper hand at Kathmándu and the treaty remained unratified. Preparations were accordingly pushed on by both sides with vigour a renewal

[1] To Mr. Gardner, dated 3rd September, from Mr. Gardner, dated 22nd September, 1815.

of hostilities and all doubt that a second campaign would be necessary was removed in the beginning of February, 1816 by a formal declaration on the part of the Gorkhális, through Gajráj Misr, that they intended to renew the war. The British army had already taken the field, and by the 10th February twenty thousand men, under General Ochterlony had reached the Bichiya-koh or Choriya-ghát pass leading into the valley of Nepál itself. On the same day[1] instructions were issued for the immediate assemblage of a force at Sítapur under Colonel Nicolls for the invasion of Doti. It was intended not only to occupy that district but, if circumstances permitted, to open up a communication with General Ochterlony to the east, and Mr. Gardner was deputed to accompany the force as Political Agent. Mr. Traill was intrusted with the conduct of the duties of the office of Commissioner of Kumaun, so far as they could not be conveniently carried on by Mr. Gardner, and Colonel Adams was directed to hold himself and his forces at the disposal of Colonel Nicolls. But long before this force could reach the Tarái news[2] arrived from General Ochterlony of the cessation of hostilities consequent on the ratification of the treaty of the 2nd December, and I must now refer to the operations which led to this desirable result.

Success due to Colonel Ochterlony.

The Gorkhális had made most formidable preparations to oppose the main body of the British by erecting fortifications and stockades on every route by which it seemed possible an army could advance. But General Ochterlony was more than a match for them even on their own ground. Taking a route through the hills which had been supposed utterly impossible, he completely turned by a bold and masterly movement the whole of the positions which the enemy had taken so much pains to fortify in the outer range of hills, and established himself at Makwánpur, within twenty miles of Kathmándu. At this point, the Gorkhális attacked the British force on the 28th February, but they were completely defeated with a loss in killed and wounded of more than eight hundred men. The loss on our side was two officers and two hundred and twenty men. When the news of this defeat reached Kathmándu

[1] Government to Mr. Gardner, dated 10th February, 1816. [2] From General Ochterlony, dated Makwánpur, 5th March, 1816; to Government, dated 10th *idem*.

all idea of further resistance was at once abandoned. Negotiations were immediately opened, the result of which was the ratification by the Raja of Nepal of the treaty which had been signed by Guru Gajráj Misr in December and the final termination of the war. Part of the Tarái which under the treaty had been surrendered to the British Government was subsequently[1] restored to Nepál as an act of conciliation towards the Gorkháli chiefs who had held lands in that quarter, the portion bordering on the Oudh frontier was handed over to the Nawáb of Oudh, and a small strip lying between the Mechi and the Tísta was given to the Raja of Sikkim. It is to be hoped that our statesmen and our soldiers will not forget the lesson that was taught them in the Nepálese campaign. It was sufficiently evident and it was admitted on all hands at the time that in point of physical courage our native soldiers were altogether inferior to the Gorkhális. This was clear not only at the more conspicuous failures of Kalanga and Jaithak but throughout the war. On the other hand, the admirable operations of General Ochterlony proved beyond a doubt that under proper management our sepoys were certain of success even in a country of most extreme difficulty to all natives of the plains and opposed to the bravest enemy that has ever met us in Asia.

Byáns boundary.

We shall now turn again to domestic politics and briefly note the effect of the treaty of Makwánpur on the tract between the Tons and the Sárda. The whole of Kumaon became British territory and the only point in dispute was a small and unimportant tract to the north. By treaty the Káli was made the boundary on the east, and this arrangement divided into two parts parganah Byáns, which had hitherto been considered as an integral portion of Kumaon as distinguished from Doti and Jumla. In 1817, the Nepál Darbar,[2] in accordance with the terms of the letter of the treaty, claimed the villages of Tinkar and Changru lying to the east of the Káli in parganah Byáns, and after inquiry had shown that the demand was covered by the terms of the treaty possession was given to

[1] The boundaries were demarcated under the superintendence of the Hon'ble E. Gardner, our first Resident at Nepál.

[2] To Commissioner, dated 4th Feb., '17.
„ „ „ 5th March, '17.
From Captain Webb, „ 11th Aug., '17.
To Government „ 20th ditto.
From Government, dated 5th Sep., '17.
To Resident, Nepál, „ 20th ditto.
From „ „ „ 10th Oct., '17.

Bam Sáh, who was then Governor of Doti. But not satisfied with this advantage, the Nepálese claimed the villages of Kunti and Nábhi as also lying to the east of the Káli, averring that the Kunti Yánkti or western branch of the head-waters should be considered the main stream as carrying the larger volume of water. Captain Webb and others showed that the lesser stream flowing from the sacred fountain of Kálapáni had always been recognised as the main branch of the Káli and had in fact given its name to the river during its course through the hills. The Government therefore decided to retain both Nábhi and Kunti, which have ever since remained attached to British Byáns.

Garhwál affairs.

In the year 1811, Sudarsan Sáh had promised Major Hearsey to grant to him the Dehra Dún and taluka Chándi, should he procure the restoration of the country then occupied by the Gorkhális. Major Hearsey now brought forward this claim, but it was rightly held by both the Raja and Government that, as the conditions precedent to the grant had not been fulfilled, Major Hearsey had no claim, legal or moral. Moreover, the Raja on receiving back a portion of his ancient possessions from the British expressly relinquished his sovereign and proprietary rights in those tracts to the British Government. At the termination of the war Sudarsan Sáh was living in great poverty at Dehra, and as an act of clemency Mr. W. Fraser in 1815, was authorised to hand over to the Raja the portions of Garhwál situated to the west of the Alaknanda with the express reservation of the Dehra Dún and the parganah of Rawáin lying between he Alaknanda and the Bhágirathi, and Mr. Fraser was directed to consult with Mr. Gardner as to the actual boundary which should be fixed with a view to control the route to Tibet by the passes available for commercial intercourse. In July, 1815, Mr. Fraser, in obedience[2] to the order of Government, had directed the principal inhabitants of the parganahs lying to the east of the Alaknanda as far as Rudrprayág and to the east of the Mandákini, above

[1] To Government, dated 4th January, 1820: from Government, dated 6th November, 1824.

[2]

To Kumaon, dated	21st July, '15.		From Kumaon, dated	12th Aug., '15.
„ „ „	12th Aug., '15.		„ „ „	8th Oct., '15.
„ „ „	27th ditto.		„ „ „	4th March, '16.
„ „ „	27th Oct., '15.		„ „ „	6th June, '16.

At the same time, the conduct of the political relations with the Raja of Garhwál was intrusted to the Commissioner as Agent to the Governor-General (4-8-16).

that point to consider themselves under the authority of the Commissioner of Kumaon, and henceforward this tract formed a portion of his jurisdiction. Mr. Gardner was too much occupied with his political duties to visit the western parganahs, and on Mr. G. W. Traill joining his appointment as Assistant Commissioner, he was deputed to Garhwál to introduce the British authority in that province and to conclude a settlement of the land-revenue. Mr. Gardner subsequently took up the question of the western boundary and gave as his opinion that Rawáin should be handed over to the Raja of Garhwál and that the British should content themselves with the watershed of the Mandákini as their north-western boundary. Rawáin comprised the comparatively barren and rocky country between Nágpur and Jaunsár Báwar and included the head-waters of the Tons, the Jumna and Bhágirathi, an immense tract yielding only 12,000 Gorkháli rupees a year, equivalent to about Rs. 5,000 of our money. The inhabitants, too, were of a turbulent character, accustomed to plunder and disinclined to work. This, however, was considered a good reason by others for keeping the tract under the British Government. It was apprehended that the Raja would find much difficulty in preventing the inhabitants from plundering the pilgrims who passed through Rawáin to Gangotri and from making predatory incursions into the neighbouring districts as they were accustomed to do before they fell under the Gorkháli Government, who only restrained them by severe measures. The task of punishing the robbers would then fall on the British Government, who might be obliged to establish a military force there for the purpose, and so interfere in its arrangements far more than if it were an integral part of the British dominions, and the people felt themselves to be our subjects. The only question for decision was whether the Raja was able to maintain peace in the tract, and it was ultimately resolved to permit him to attempt the management of Rawáin. In 1816 Mr. Traill[1] brought to the notice of Government the difficulty that might arise if more precise words were not used in defining the boundary. Although parganah Nágpur was clearly intended to be included in the portion of territory retained by the British, the loose use of the Alaknanda and Mandákini rivers as the eastern boundary in the negotiations

[1] To Government, dated 6th June, 1816.

of the period would have cut off some valuable portions of that parganah, including pattis Bámsu, Maikhanda, and the mines near Dhanoli, which lay to the west of those rivers. In fact, in 1823, the Raja laid claim to the villages lying to the west of the Mandákini on these very grounds, but it was ruled that the term parganah Nágpur as used in the negotiations included all the sub-divisions then within its established limits.

In 1818 we find Mr. Traill,[1] complaining of the disorderly state of the Rawáin parganah, the inhabitants of which being relieved from the fear of both the Gorkhális and the British had taken to their old occupation of plundering the pilgrims to Gangotri and Kedárnáth. The Raja was appealed to in vain and declared himself wholly unable to punish the offenders When he sent his own men against the Rawáinis, the cultivators armed themselves and repelled his people by force, and when the Raja himself went against them, they fled into the neighbouring territories, and he had not yet been able to collect a single rupee of revenue from the whole parganah. The real question at issue now was whether the Raja was able to maintain peace in the tract. The boundaries were then laid down as they now exist, for Rawáin was never taken back and was formally annexed to Tirhi in 1824. It was not until this time that a formal sanad under the seal of the Supreme Government was conferred upon the Raja, for certain difficulties had arisen which required settlement. The Basáhr Raja laid claim[2] to the taluka of Undra Kunwar, although it had been included in the grant made to the Raja of Garhwál by Mr. Fraser referred to above. Again, Pítam Sáh, the uncle of the Raja, released from prison in Nepál through the good offices[3] of Mr. Gardner, claimed the zamíndári right in the parganahs of Garhwál and the Dún ceded to the British by the Gorkhális on apparently no better ground than that of his being the next heir to the *rái* of Garhwál. His brother's claim to a similar right had already been refused, and it was held that the renunciation by Sudarshan Sáh of all claims of this kind on his

[1] To Government, dated 10th July, 1818. From Government, dated 14th August, 1818. [2] To Government, dated 4th January, 1817. [3] To Government, dated 19th May, 1816: from Government, dated 14th August, 1818: from Government, dated 15th January, 1817.

acceptance of the territories restored to him by the British, as well as the previous conquest of the Gorkhális, annulled all subordinate contingent rights of other members of his family.[1] By the terms of his sanad the Raja of Garhwál is bound to give assistance and supplies when called on and to furnish facilities for trading in his country and the countries beyond, nor can he alienate or mortgage any portion of his territory without the consent of the British Government.[2]

Under the British.

The administrative history under the British Government will find its place under the notice of each district. The Dún was first brought into order by Mr. Shore and Kumaon and Garhwál by Mr. Traill. In fact, the administrative history of the Kumaon Division, as remarked by Mr. Whalley,[3] naturally divides itself into three periods—Kumaon under Traill, Kumaon under Batten, and Kumaon under Ramsay. The régime in the first period was essentially paternal, despotic, and personal. It resisted the centralising tendencies which the policy of the Government had developed. It was at the same time, though arbitrary, a just, wise and progressive administration. As characteristic of the man, his application for a copy of the Regulations in force in the plains, may be quoted, in which he stated that as he found it necessary to draw up some code for the guidance of his subordinates and had not for six years received the Regulations in force in the plains, he should be glad of a copy to see whether there was anything in them which should suit the peculiar circumstances of his charge. Mr. Traill's administration lasted from 1815 to 1835. On his departure there followed an interval of wavering uncertainty and comparative misrule. "The system of government," as was observed by Mr. Bird, "had been framed to suit the particular character and scope of one individual," or, as he might have said, had been framed for himself by that individual. "Traill left the province orderly, prosperous, and comparatively civilized, but his machinery was not easily worked by another hand. There was no law, and the lawgiver had been withdrawn. The Board of Commissioners and

[1] From Board, dated 18th August, 1818: to Board, dated 3rd September, 1818, and 11th September, 1818: from Board, dated 11th September, 1818, and 25th September, 1818. [2] Aitch. Treaties, II., 58. [3] Laws of the Non-Regulation Provinces, p. 1: Allahabad, 1870: a valuable repository of facts regarding the administrative history of the hill districts.

the Government, which had remained quiescent while the province was in the hands of an administrator of tried ability and equal to all emergencies, found it necessary to re-assert their control and to lay down specific rules in matters that had hitherto been left to the judgment of the Commissioner. Mr. Batten was then only Assistant Commissioner of Garhwál: but he was a man eminently qualified both by training and disposition to second the action of Government and to assist in the inauguration of the new era. His talents had already been recognized, and from this period he was consulted in every step, and it was his influence more than that of any single officer which gave its stamp and character to the period which I have distinguished by his name. Its duration covered the years 1836-56. It was marked in its earlier stage by an influx of codes and rules and a predominancy of official supervision which gradually subsided as Mr. Batten gained in influence, position and experience. Thus the second period glided insensibly into the third, which, nevertheless, has a distinctive character of its own. In Sir Henry Ramsay's administration we see the two currents blended. The personal sway and unhampered autocracy of the first era combining with the orderly procedure and observance of fixed rules and principles which was the chief feature of the second." Foremost in every movement for the benefit of his charge, Sir Henry Ramsay has popularly received the title of King of Kumaon, and no more worthy representative of Her Imperial Majesty exists throughout Her wide domains.

Traill.

For the history of Kumaon under the British the materials are ample and sufficient in themselves to form a volume full of interest and instruction. They show the means whereby a peculiar people, sunk in the uttermost depths of ignorance and apathy, the result of years of oppression and misrule, have been induced by the patient and intelligent efforts of a few Englishmen to commence again their national life. They show how whole tracts where formerly the tiger and the elephant reigned supreme have now yielded to the plough, and waters that not long since went to feed the deadly swamps are now confined in numerous channels to irrigate the waterless tracts which increasing population bring into cultivation. The history of Kumaon under the British is one that will amply repay

the study and assist us in understanding the principles on which western civilisation can be best introduced among our many half-civilized Indian communities. For the materials for this notice we are indebted to the records of the Commissioner's office and Mr. P. Whalley's admirable work already quoted. As already noticed the Hon'ble E. Gardner was the first Commissioner of Kumaon, and in May, 1815, he was authorized to employ a revenue and police establishment.[1] In June, the transit duty on the sale of children was given up and the practice abolished.[2] The Commissioner was much taken up with his political duties, and in August, 1815, on the arrival of Mr. G. W. Traill, that officer was appointed to superintend the police and revenue administration and to undertake the settlement of the revenue of Garhwál and Kumaon. His own account of the measures he thought necessary for this purpose will be given elsewhere. In the first year the Gorkháli collections were assumed as the basis for assessment, and subsequent settlements were made under orders of the Board of Commissioners at Farukhabad, under whom[3] Kumaon was placed in 1816 A.D.

Administration.

The subjects of the extradition of criminals with Nepál and forced labour were among the earliest to which attention was given: in both these instances rules were framed very similar to those at present in force. On the 1st of August, 1817, Mr. Traill was made Commissioner of Kumaon and Regulation X. of 1817 was passed to give criminal jurisdiction to the Kumaon officers in all cases except murder, homicide, robbery, treason and other similar offences, and for the trial of these a Commissioner was to be appointed by the Governor-General in Council. It speaks very well for the people that crimes of this kind were so rare that it was not found necessary to invest any officers with the powers of a Commissioner under this Regulation. In 1828, the Province was placed in the Bareilly Division for the purposes of criminal trials, and from that time commitments appear to have been made to the Bareilly Court from Kumaon. In 1818 the question of transit duties in general came up for consideration in consequence of the report of the Superintendent of Police complaining of the highly injurious character of the system then

[1] G. G. in C. 15th May, 1815. [2] *Ibid.*, 2nd June, 1815. [3] Proceed. G. G. in C., 19th October, 1816.

in force. By this system, for the small sum of Rs. 8,881 a farmer was able to place a line of guard-houses along a frontier extending nearly sixty miles and levy practically whatever duties he liked,[1] and in consequence these vexatious cesses were abolished. In 1817 a curious practice of the hill men was prohibited. In former times it was allowable for the husband of an adulteress to take the life of an adulterer after due notice given to the executive government. The consequence was that many innocent persons suffered death at the hands of jealous husbands who found themselves both judges and executioners. The Government made the practice punishable with death and thus effectually put an end to a custom which was one of the most frequent sources[2] of hereditary feuds.

In 1820, an eight-anna stamp was introduced by Mr. Traill on his own authority into civil proceedings and a short and simple procedure adopted.[3] On the plaint being admitted a notice was given to the suitor to be served by himself on his defendant, a practice which was found in three-fourths of cases to lead to a private settlement of the claim, and when ineffectual the defendant was summoned. Parties were allowed to plead their own cause and recourse was seldom had to an oath in the examination of witnesses, as it was found that the facts of a case could easily be eliminated without employing a ceremony of which frequent application only weakens the force. No licensed law-agents were allowed, but parties who were not able to attend were permitted to appoint any person as their agent. This regulation at once precluded all vexatious litigation and prevented unnecessary delay[4] in the proceedings. In 1824, it was proposed that the Tarái should be transferred to Moradabad and after a very lengthened correspondence the boundaries were fixed between the plains and the hills by Messrs. Halhed and Traill. There is nothing more characteristic of the imperious and almost despotic nature of Traill than the letters he wrote and the arguments he used in this controversy, and the result was that he gained his own way on almost every question. He appears to have looked more to facts than theories and to have included in the hill portion of the Bhábar at least those

[1] Whalley, p. 33. [2] G. G. in C., 1250, 6th August, 1819. [3] To Government (Political Department), 14th November, 1820. [4] *Ibid.*, 16th May, 1821; Whalley, 47.

portions of the lower forest and prairie which were thought to be more in the real or nominal possession of the hill-men than in that of settlers from the plains or in which the Bhuksas and Thárus preferred the hill jurisdiction or were connected with hill capitalists.[1] In 1825, after the settlement of Major Hearsey's claims, a correspondence arose regarding the annexation of parganah Chandi now in Bijnor to Kumaon, and during the same year an epistolary conflict took place between Traill and Shore in charge of Dehra Dún principally regarding the use of elephant-pits on the confines of their respective jurisdictions. The result of both was that in 1826 parganahs Chandi and Dehra Dún were annexed to the Kumaon Commissionership.[2] Dehra Dún was separated again from 1st May, 1829 by Regulation V. of 1829, but parganah Chandi continued under Kumaon for some time. In 1827 certain rules were framed giving the Magistrates in Kumaon jurisdiction over native soldiers in certain cases, and in the following year a registration of births, marriages and deaths was ordered. In 1830 Mr. Traill was appointed to the charge of the Bareilly Division, and at the close of the year 1835 he finally relinquished his connection with the Kumaon Division. In 1831 the newly-created Nizámat Adálut at Allahabad was invested with criminal powers over Kumaon by clause 1, section 3, of Regulation VI. of that year, and in the same year the Board of Revenue at Allahabad was invested with powers in all fiscal matters by section 5 of Regulation X. of 1831.

Interregnum.

Colonel Gowan was appointed Commissioner of Kumaon in 1831, and his assumption of office is marked by a closer supervision by the plains authorities, who now for the first time took a direct part in the administration of the province. The year 1836 is marked by the abolition of slavery in every shape. Hitherto transit duties on slaves, the sale of wives by their husbands and the sale of widows by the heirs or relations of the deceased had alone been restricted. The Rajpúts as household slaves and the Doms as slaves for the cultivation of land were, in accordance with immemorial custom, a subject of barter and sale and claims for freedom or servitude

[1] G. O., 21st May, 1824: Board of Revenue, 11th June, 1824: 14th August, 1823. [2] G. G., 25th June, 1825., No. 16: *Ibid.*, 8th December, 1825.

were heard like other suits. The Government at length stepped in and by merely forbidding the hearing of such suits put an end to a system which must be regarded as a blot on the administration of the most powerful ruler Kumaon has ever had.[1] The questions of the investigation of rent-free tenures, the surrender of refugees, the arrangement of the records and the treatment of lunatics also engaged the attention of the superior authorities during this year. The year 1837 is also marked with the lively sense of the necessity for further interference in the administration of Kumaon which the Board of Revenue and Government had shown in the previous year. The Nizámat Adálut forbade Magistrates to order the restoration of wives to their husbands and directed the punishment of the importers of slaves into Kumaon under the provisions of Regulation III. of 1832. On the civil side the slaughter of kine for troops was restricted to the cantonments. Those who object to the scruples of the hill people on account of kine-killing should remember that whereas Benares, Mathura and other Hindu cities have been for centuries under direct Muhammadan rule Kumaon never had a beef-eating ruler until the British took possession. The few Muhammadans previously known in the hills were the families of shikáris and cooks who received favour at the hands of the Rajas, the former for killing game and the latter for providing suitable food for any Musalmán visitor of rank. The revenue authorities were no less busy. We have rules for process-servers and their fees, the supply of grain to the troops and the recognition of *bádsháhi* grants. This year saw the re-annexation of the Káshipur parganahs to their respective districts and the Tarái to the Rohilkhand Commissionership. A curious question was also submitted for decision as to the legality of the ordeal by hot iron, a description of which has already been given. Colonel Gowan seems to have quarrelled with the revenue authorities, and on his refusal to supply information was reported to Government, who ruled his absolute subordination. In 1837, he reports that up to 1829 only one court existed for the cognizance and adjudication of civil claims, and this was presided over by Mr. Traill himself. In that year a recourse to local subordinate tribunals was thought necessary in the ends of justice and good government.

[1] To Commissioner, 31st May, 1836.

The duties of a Munsif or Civil Court of the primary jurisdiction were with 'the sanction of Government delegated to the Kánúngoes, who under the new system of Patwáris had since 1819 scarcely any duties to perform. The number of Munsifs was fixed at eight, of whom seven were Kánúngoes and one with the title of Sadr Amín became the pandit of the Court at Almora. Six were stationed in the Kumaon and two in the Garhwál district and rules for their guidance were drawn up in the spirit of Regulation XXIII. of 1814. These officers were empowered to decide claims for rent for the current year and damages on account of cattle-trespass and claims for money or personal property up to Rs. 25. In 1830 their jurisdiction was increased to Rs. 50, with an appeal to the Commissioner (now to his Assistants). The Sadr Amín had power to hear suits up to Rs. 100 in value. Above this, all suits for money and all claims to real property were heard in the Courts of the Commissioner or his Assistants. The institution stamp-fee was also raised to two per cent. on the claims.[1]

Mr. Bird's report.

In 1837 Mr. R. M. Bird visited Kumaon and recorded one of his masterly minutes on the state of the administration. He was perhaps pardonably influenced by the insubordination of the Commissioner in judging both of the past and the present. Of the past, referring to Traill, he remarks that 'the results of the experiment of conferring large and undefined powers on a single individual have not turned out altogether favorable.' Of the present he writes 'the present incumbent (Colonel Gowan) is not a man of any official experience in any department and himself requires guidance and control.' Of the three Assistants he praises Mr. Batten very highly and recommends his being placed in charge of the settlement of both districts. Captain Corbett was in command of the local battalion at Hawalbágh and was subsequently transferred to Almora and Mr. Thomas was sent to Garhwál. Mr. Bird describes the administration of civil justice as requiring the supervision of the superior authorities and recommends that the Commissioner of Bareilly should go on circuit and make a catalogue of all civil cases decided by the Kumaon authorities and any objection or applications of

[1] Letter, 17th March, 1837.

appeal which might be offered, and that he should forward this with his opinion to the Sadr Diwáni Adálat, who might then call for such cases as they might think fit. In criminal cases he characterizes the administration 'as unimaginably bad.' He was credibly informed that persons were apprehended, retained in jail, and worked in irons on the roads for years, not only unsentenced and untried but even without any charge having been recorded. He recommended the adoption of the Assam rules and the subjection of the Courts to the appellate authority of the Sadr Court and Board of Revenue. The Government had previously allowed a sort of irregular appeal by referring cases for the opinion of the Sadr Court and then passing final orders thereon. In accordance with Mr. Bird's suggestions Act X. of 1838 was passed, in which the only new provision is the control given to the Sadr Diwáni Adálat in civil cases. This provision was lost sight of in the rules of 1863 (section 63) and was virtually rescinded by Act XXIV. of 1864, which stamped the rules, so far as the jurisdiction of the Courts is concerned, with legislative sanction.[1] In was not till 1839 that any active measures were taken in consequence of the new powers given to the superior Courts. In that year and the following the Board issued a multitude of instructions in regard to partitions, patwári's accounts, summonses, process-fees, watchmen, stamps, distraint, compensation, village police, &c., which could only have a partial application to Kumaon. The Sadr Court seems to have followed the same course and with as little care or discrimination in their orders. The result of all this was in one way an increased responsibility thrown on the Commissioner in judging what orders of the superior Courts could be considered applicable to the peculiar people over whom he ruled, and a decreased personal responsibility in that the general principles of administration were now laid down by higher authority, on whom the blame or praise for failure or success would in future principally rest. The police administration of the Tarái was given over to the Magistrates of the adjoining districts in Rohilkhand.

[1] The Assam rules were promulgated in January, 1839, under Act X. of 1838, and remained in force till 1862, when the Jhánsi rules passed in 1862 were introduced and subsequently legalised by section 2 of Act XXIV. of 1864. In supersession of Regulation X. of 1817, certain rules for criminal administration were framed which remained in force till the Criminal Procedure Code was introduced in 1862.

But in no case was the change more marked than in the instructions for the revenue assessment. Regulations VII. of 1822 and IX. of 1833 were introduced and Mr. Batten, then Senior Assistant in Garhwál, was appointed to the charge of the settlement of the entire province. His instructions were to aim as far as possible at conducting the settlement on the principles that were observed in the plains, and how far he succeeded is noticed in the chapter on the fiscal history of the Kumaon division. To return to other matters, rules for cases of abduction and adultery were framed by the Sadr Court in 1840, and again in 1843 the Government intimated its desire that the law in force in the plains should in all cases be adopted.[1] 1839 is also marked by the division of Kumaon into the two districts of Kumaon and Garhwál with a regular staff of officers for each; the Senior Assistants to have the same powers as a Collector and the Commissioner the powers of a Commissioner in the plains. The duties of the officials in connection with the appointment and dismissal of priests of Hindu temples were also defined.[2] In 1848 Mr. G. T. Lushington[3] died and was succeeded by Mr. J. H. Batten. In 1850 a commission was issued to Mr. (now Sir John) Strachey to enquire into the *sadabart* assigments for charitable purposes made in favour of the temples of Badrináth and Kedárnáth, which resulted in orders[4] being issued for their management by a committee as a trust in the spirit of Regulation XIX. of 1810. In 1852-53 the first rules for the grant of waste land for tea plantations were made and the tea industry came into prominence. In 1855 the rules at present in force in regard to revenue suits and suits for rent were framed and received the sanction of Government. They are of a simple character, easily worked, and are said by those who administer them to be admirably adapted for the people. In 1856 Captain (now Major-General Sir Henry) Ramsay was appointed Commissioner, and we may here fitly close our sketch of Kumaon history.

End.

[1] Government (Judicial Department), dated 14th September, 1839, dated 9th June, 1843. [2] Government (Judicial Department), dated 12th June, 1840: Government (Revenue Department), dated 18th May, 1846; dated 26th June, 1847. [3] Mr. Lushington appears to have been Commissioner from 1839 to 1848. [4] Government (Revenue Department), dated 8th October, 1853.

APPENDIX.

LETTERS INTERCEPTED DURING THE NEPAL WAR.

From Amar Singh and his sons, Rámdas and Arjan Thápa, to the Raja of Nepal, dated Rájgarh, 2nd March, 1815.

A copy of your letter of the 23rd December addressed to Ranjor Singh under the red seal was sent by the latter to me, who have received it with every token of respect. It was to the following purport:—"The capture of Nálapáni by the enemy had been communicated to me from Garhwál and Kumaon as also the intelligence of his having marched to Náhan; having assembled his force he now occupied the whole country from Baraparsa to Sabotari Mahotari. My army also is secretly posted in various places in the jungles of the mountains. An army under a general has arrived in Gorakhpur from Palpa and another detachment has reached the borders of Bijipur. I have further heard that a general officer has set out from Calcutta to create more disturbance. For the sake of a few trifling objects, some intermediate agents have destroyed the mutual harmony, and war is waging far and wide. All this you know. You ought to send an embassy to conciliate the English, otherwise the cause is lost. The enemy after making immense preparations have begun the war, and, unless great concessions are made, they will not listen to terms. To restore the relations of amity by concession is good and proper: for this purpose it is fit, in the first place, to cede to the enemy the districts of Bútwal, Palpai and Siuráj and the disputed tracts, already settled by the Commissioners towards Bareh. If this be insufficient to re-establish harmony, we ought to abandon the whole of the Tarái, the Dún and the lowlands, and, if the English are still dissatisfied on account of not obtaining possession of a portion of the mountains, you are herewith authorised to give up, with the Dún, the country as far as the Satlaj. Do whatever may be practicable to restore the relations of peace and amity, and be assured of my approbation and assent. If these means be unsuccessful, it will be very difficult to preserve the integrity of my dominions from Kanka Tísta to the Satlaj. If the enemy once obtain a footing in the centre of our territory both extremities will be thrown into disorder. If you can retire with your army and military stores, to pursue any other plan of operations that may afterwards appear eligible, it will be advisable. On this account, you ought immediately to effect a junction with all the other officers on the western service and return to any part of our territory which, as far as Nepál, you may think yourself capable of retaining. These are your orders."

In the first place, after the immense preparations of the enemy he will not be satisfied with these concessions, or, if he should accept of our terms, he would serve us as he did Tippoo, from whom he first accepted of an indemnification of six krors of rupees in money and territory, and afterwards wrested from him his whole country. If we were to cede to him so much country, he would excite another disturbance at a future opportunity and seek to wrest from us other provinces. Having lost so much territory we should be unable to maintain our army on its present footing, and our military fame being once reduced, what

means should we have left to defend our eastern possessions? While we retain Basáhr, Garhwál is secure; if the former be abandoned, the Bhotiyas of Rawáin will certainly betray us. The English having thus acquired the Dún and Rawáin, it will be impossible for us to maintain Garhwál, and being deprived of the latter, Kumaon and Doti will be also lost to us: after the seizure of these provinces, Achám, Júmla and Dúlú Dwalekh will be wrested from us in succession. You say that a proclamation has been issued to the inhabitants of the Eastern Kuráts; if they have joined the enemy, the other Kuráts will do so likewise, and then the country from the Dúdh Kosi on the east to the Beri on the west cannot be long retained. Having lost your dominions, what is to become of your great military establishment? When our power is once reduced, we shall have another Major Knox's mission under pretence of concluding a treaty of alliance and friendship and founding commercial establishments. If we decline receiving their mission they will insist; and, if we are unable to oppose force and desire them to come unaccompanied with troops, they will not comply and they will begin by introducing a company, a battalion will soon after follow, and at length an army will be assembled for the subjection of Nepál. Thus you think that if, for the present, the lowlands, the Dún and the country to the Satlaj were ceded to them, they would cease to entertain designs upon the other provinces of Nepál. Do not trust them. They who counselled you to receive the mission of Knox and permit the establishment of a commercial factory will usurp the government of Nepál. With regard to the concessions now proposed, if you had in the first instance decided upon a pacific line of conduct and agreed to restore the departments of Bútwal and Shiuráj as adjusted by the Commissioner, the present contest might have been avoided; but you could not suppress your desire to retain these places, and having murdered three revenue officers, a commotion arose and war was waged for trifles.

At Jaithak we have gained a victory over the enemy. If I succeed against Ochterlony and Ranjor Singh with Jaspao Thápá and his officers prevail at Jaithak, Ranjít Singh will rise against the enemy. In conjunction with the Sikhs my army will make a descent into the plains, and our forces crossing the Jumna from two different quarters will recover possession of the Dún. When we reach Hardwár, the Nawáb of Lucknow may be expected to take a part in the cause; and on his accession to the general coalition we may consider ourselves secure as far as Kanka. Relying on your fortune, I trust that Balbhadr Kunwar and Rewant Káji will soon reinforce the garrison of Jaithak, and I hope ere long to send Panth Káji with eight companies when the force there will be very strong. The troops sent by you are arriving every day, and when they all come up, I hope we shall succeed both here and at Jaithak.

Formerly, when the English endeavoured to penetrate to Sandauli, they continued for two years in possession of Baraparsa and Mahotari; but when you conquered Nepál they were either destroyed by your force or fell victims to the climate with the exception of a few only who abandoned the place. Orders should now be given to all your officers to defend Chaudandi and Chaudena and the two Kuráts and the ridge of Mahábhárat; suffer the enemy to retain the lowlands for a couple of years: measures can afterwards be taken to expel them. Lands transferred under a written agreement cannot again be resumed;

but, if they have been taken by force, then force may be employed to recover them. Fear nothing, even though the Sikhs should not join us.

Should you succeed in bringing our differences to an amicable termination by the cession of territory, the enemy in the course of a few years would be in possession of Nepál, as he took possession of the country of Tippoo. The present therefore is not the time for treaty and conciliation: these expedients should have been tried before the murder of the revenue officers, or must be postponed till victory shall crown our efforts. If they will then accede to the terms which I shall propose, it is well; if not, with the favor of God and your fortune and that of our country, it will be my business to preserve the integrity of my country from Kanka to the Satlaj. Let me intreat you, therefore, never to make peace. Formerly, when some individuals urged the adoption of a treaty of peace and commerce, I refused my assent to that measure, and I will not now suffer the honour of my Prince to be sullied by concession and submission. If you are determined on this step, bestow the humiliating office on him who first advised it, but for me call me once more to your presence. I am old, and only desire once more to kiss your feet! I can recollect the time when the Gorkháli army did not exceed 12,000 men! Through the favour of heaven and the renown of your forefathers, your territory was extended to the confines of Kanka on the east. Under the auspices of your father we subjugated Kumaon, and through fortune we have pushed our conquests to the Satlaj. Four generations have been employed in the acquisition of all this dignity and dominion. At Nálapáni Balbhadr Singh cut up 3 or 4,000 of the enemy; at Jaithak, Ranjor Singh, with his officers, overthrew two battalions. In this place I am surrounded and daily fighting with the enemy and look forward with confidence to victory. All the inhabitants and chiefs of the country have joined the enemy. I must gain two or three victories before I can accomplish the object I have in view of attaching Ranjít Singh to our cause; on his accession, and after the advance of the Sikhs and Gorkhális towards the Dakhan, the chiefs of the Dakhan may be expected to join the coalition, as also the Nawáb of Lucknow and the Sáligrami Sádh. Then will be the time for us to drive out the enemy and recover possession of the low countries of Paipai as far as Bijipur. If we succeed in regaining these, we can attempt further conquest in the plains.

There has been no fighting in your quarter yet. The Chaudandi and Chaudena of Bijipur, as far as the ridge of Mahábhárat and Kiliána, should be well defended. Countries acquired in four generations, under the administration of the Thápás, should not be abandoned for the purpose of bringing matters to an amicable adjustment without deep and serious reflection. If we are victorious in the war, we can easily adjust our differences; and if we are defeated, death is preferable to a reconciliation on humiliating terms. When the Chinese army invaded Nepál we implored the mercy of heaven by offerings to the Brahmans and the performance of religious ceremonies, and through the favor of one and the intercession of the other we succeeded in repelling the enemy. Ever since you confiscated the jágírs of the Brahmans, thousands have been in distress and poverty. Promises were given that they should be restored at the capture of Kangra, and orders to this effect under the red seal were addressed to me and Nain Singh Thápa. We failed, however, in that object, and now there

is an universal commotion; you ought, therefore to assemble all the Brahmans and promise to restore to them their lands and property, in the event of your conquering and expelling the English. By these means many thousands of respectable Brahmans will put up their prayers for your protection and the enemy will be driven forth. By the practice of charity the territory acquired in four generations may be preserved and, through the favour of God, our power and dominion may be still further extended. By the extension of territory our military establishment may be maintained on its present footing and even increased. The numerous countries which you propose to cede to the enemy yielded a revenue equal to the maintenance of an army of 4,000 men, and Kangra might have been captured. By the cession of these provinces the fear of your name and the splendour of your court will no longer remain; by the capture of Kangra your name would have been rendered formidable, and though that has not happened, a powerful impression has nevertheless been made on the people of the plains by the extension of your conquest to the Satlaj.

To effect a reconciliation by the cession of the country to the west of the Jumna would give rise to the idea that the Gorkhális were unable to oppose the English, would lower the dignity of your name in the plains, and cause a reduction of your army to the extent of 4,000 men. The enemy will therefore require the possession of Basáhr, and after that the conquest of Garhwál will be easy, nor will it be possible in that case for us to retain Kumaon, and with it we must lose Dot, Achám and Jumla He may be expected to penetrate even to Beri. If the English once establish themselves firmly in possession of a part of the hills, we shall be unable to drive them out. The countries towards the Satlaj should be obstinately defended. The abandonment of the disputed tracts in the plains is a lesser evil. The possession of the former preserves to us the road to further conquests; you ought therefore to direct Guru Rangnáth Pandit and Balbhanján Pánde to give up the disputed lands of Bútwal and Shiuráj and the twenty-two villages in the vicinity of Bareh, and, if possible, bring our differences to a termination. To this step I have no objection and shall feel no animosity to those who may perform this service. I must however declare a decided enmity to such as in bringing about a reconciliation with the English consult only their own interest and forget their duty to you. If they will not accept these terms, what have we to fear? The English attempted to take Bhartpur by storm, but the Rajá Ranjit Singh destroyed a European regiment and a battalion of sepoys, so that to the present day they have not ventured to meddle with Bhartpur and one fort has sufficed to check their progress. In the low country of Dárma (perhaps Burmá) they established their authority, but the Rajá overthrew their army and captured all their artillery and stores, and now lives and continues in quiet possession of his dominions. Our proffers of peace and reconciliation will be interpreted as the result of fear, and it would be absurd to expect that the enemy will respect a treaty concluded under such circumstances; therefore let us confide our fortunes to our swords, and by boldly opposing the enemy compel him to remain within his own territory, or if he should continue to advance, stung with shame at the idea of retreating after his immense preparations, we can then give up the lands in dispute and adjust our differences. Such, however, is the fame and terror of our swords that Balbhadr with a nominal force

of 600 men destroyed an army of 3 or 4,000 English. His force consisted of the old Gorakh and Kurakh companies, which were only partly composed of the inhabitants of our ancient kingdom and of the people of the countries from Beri to Garhwál, and with these he destroyed one battalion and crippled and repulsed another. My army is similarly composed; nevertheless, all descriptions are eager to meet the enemy. In your quarter you are surrounded with the veterans of our army, and therefore cannot apprehend desertion from them. You have also an immense militia, and many jágírdárs who will fight for their own honour and interests. Asembling the militia of the lowlands and fighting in the plains is impolitic; call them into the hills and cut them up by detail (a passage here the sense of which cannot be discovered).

The enemy is proud and flushed with success and has reduced under his subjection all the western zamíndárs The Rajas and Ránás of Kárnál and the Thakuráin will keep peace with no one. However, my advice is nothing. I will direct Rámdas to propose to General Ochterlony the abandonment on our part of the disputed lands, and will forward to you the answer which he may receive. All the Ránás, Rajás, and Thakuráin have joined the enemy and I am surrounded; nevertheless we shall fight and conquer, and all my officers have taken the same resolution. The Pandits have pronounced the month of Baisákh as particularly auspicious for the Gorkhális, and by selecting a fortunate day we shall surely conquer. I am desirous of engaging the enemy slowly and with caution, but cannot manage it, the English being always in a desperate hurry to fight. I hope however to be able to delay the battle till Baisakh, when I will choose a favourable opportunity to fight them. When we shall have driven the enemy from hence, either Ranjor Singh or myself, according to your wishes, will repair to your presence. In the present crisis, it is very advisable to write to the Emperor of China and to the Lámá of Lhása and to the other Lámás, and for this purpose I beg leave to submit the enclosed draft of a letter to their address. Any errors in it, I trust, will be forgiven by you, and I earnestly recommend that you lose no time in sending a petition to the Emperor of China and a letter to the Lámás.

ENCLOSURE.

Translation of a draft of petition to be addressed to the Emperor of China by the Raja of Nepál.

I yield obedience to the Emperor of China, and no one dare invade my dominions; or if any force has ventured to encroach on my territory, through your favor and protection I have been able to discomfit and expel them! Now, however, a powerful and inveterate enemy has attacked me and, as I am under allegiance to you, I rely on obtaining your assistance and support. From Kanka to the Satlaj, for a thousand kos war is waging between us. Harbouring designs upon Bhot, the enemy endeavours to get possession of Nepál, and for these objects he has fomented a quarrel and declared war; five or six great actions have already been fought, but through the fortune and glory of your Imperial Majesty I have succeeded in destroying about 20,000 of the enemy. But his wealth and military resources are great, and he sustains the loss without receding a step; on the contrary numerous reinforcements continue to arrive, and my country is invaded

at all points. Though I might obtain a hundred thousand soldiers from the hills and plains, yet without pay they cannot be maintained, and, though I have every desire to pay them, I have not the means: without soldiers I cannot repel the enemy. Consider the Gorkhális as your tributaries; reflect that the English come to conquer Nepál and Bhot; and for these reasons be graciously pleased to assist us with a sum of money that we may levy an army and drive forth the invaders or if you are unwilling to assist us with subsidies and prefer sending an army to our aid, 'tis well.' The climate of Dárma is temperate; and you may easily send an army of 2 or 300,000 men by the route of Dárma into Bengal, spreading alarm and consternation among the Europeans as far as Calcutta. The enemy has subjugated all the Rajas of the plains and usurped the throne of the King of Delhi, and therefore it is to be expected that these would all unite in expelling the Europeans from Hindustan. By such an event your name will be renowned through Jambu-dwípa; and whenever you may command, the whole of its inhabitants will be forward in your service. Should you think that the conquest of Nepál and the forcible separation of the Gorkhális from their dependence on the Emperor of China cannot materially affect your Majesty's interests, I beseech you to reflect that without your aid I cannot repel the English; that these are the people who have already subdued all India and usurped the throne of Delhi; that, with my army and resources, I am quite unable to make head against them, and that the world will henceforth say that the Emperor of China abandoned to their fate his tributaries and dependants. I acknowledge the supremacy of the Emperor of China above all other potentates on earth. The English, after obtaining possession of Nepál, will advance, by the routes of Badrináth and Mánásarowar and also by that of Digarcha, for the purpose of conquering Lhása. I beg therefore that you will write an order to the English, directing them to withdraw their forces from the territory of the Gorkháli state, which is tributary to and dependent upon you: otherwise you will send an army to our aid. I beseech you, however, to lose no time in sending assistance, whether in men or money, that I may drive forth the enemy and maintain possession of the mountains; otherwise in a few years he will be master of Lhása.

CHAPTER VIII.

RELIGION.

CONTENTS.

Religion in India: in the Himálaya. Dæmonism. Kumaon's place in the history of religion in India. Vishnu in the Vedas. Rudra. Brahma unknown. Vishnu in the epic and Pauránik periods: as Ráma: as Krishna. Sisupála opposes Krishna. Duryodhana, Sálya and Karna. Krishna only a partial incarnation of Vishnu. Nara and Náráyana. Krishna one with the Supreme being. Mahádeva glorifies Krishna. Krishna praises himself. Brahma praises Krishna. Exploits of Krishna. The later Rudra. Mahádeva. Interpolations in the epic poems. Contests between the Saivas and Vaishnavas. Ráma. Daksha's sacrifice. Contest between Rudra and Náráyana. Contest between Krishna and Bána. The false and the true Vásudeva. Vásudeva. Reconciliation of Siva and Vishnu. The modern Siva, a non-Bráhmanical deity. Sakti. Linga.

Religion in India.

There is no country in the world in which religion exercises more influence on social and political life than in India. Religion gives the key-note to most of the great changes that have occurred in the history of the races inhabiting this country from the earliest ages to the present day. To every individual its forms are ever present and exercise a perceptible influence on his practices both devotional and secular, and yet the true history of religious thought in India has yet to be written. There is an esoteric school and an exoteric school: to the former too much attention has been paid, to the great neglect of the living beliefs which influence the masses of the people. Most writers on India have looked to the Vedas and the works connected with them as the standard by which all existing forms of religious belief in India are to be judged and to which all are to be referred. Influenced doubtless by the antiquity, richness and originality of the Vaidik records they have sought to connect them with the popular religion and have viewed modern beliefs more as to what they ought to be than as to what they actually are. As a matter of fact the Vedas are practically unknown to and uncared for by the majority of Hindus. There is no translation of them into the vulgar tongue in use amongst the people, and it would be contrary to the spirit of Bráhmanism to popularise them or their

teachings. They are less known, therefore, to the Hindus than the Hebrew original of the Old Testament is to the majority of the Christian populations of Europe. Some sects do not acknowledge their authority in matters of faith and practice and they are in no sense 'a Bible' to the masses except to a few of the learned and have little practical influence over modern religious thought outside the same class. Though portions of the Vedas, notably of the collection ascribed to the Atharvans, are recited at ceremonies and verses from them occasionally occur in the domestic ritual, as a rule, neither the celebrant nor the worshipper understand their purport. They are learned by rote and those employed in the ceremony regard the words used more as spells to compel the deities than as prayers for their favour. Yet we would ask the intelligent reader to formulate what he understands by Hinduism and he will at once answer, the religion of the Vedas. We must, however, accept the term Hinduism as a convenient one embracing all those beliefs of the people of India which are neither of Christian nor of Musalmán origin. But within this pale we have sects as divided from each other as members of the Society of Friends are from Roman Catholics. We have followers of the Vedas, of Bráhmanism, of Buddhism and of the polydæmonistic tribal cults of the aboriginal populations and of eclectic schools religious and philosophical of every kind and class. The religion of the Vedas never took hold of the people.[1] It was followed by Bráhmanism designed to exalt the priestly class, but even this system had to abandon the Vaidik deities and admit the dæmons of the aborigines to a place in its pantheon, or otherwise it would have perished. Buddhism was originally a protest against sacerdotalism not necessarily against the Bráhmanical caste, but it too succumbed to dæmonistic influences and degraded and corrupted fell an easy prey to its rival Bráhmanism. Both sought the popular favour by pandering to the vulgar love of mystery, magical mummeries, superhuman power and the like, and Bráhmanism absorbed Buddhism rather than destroyed it. The Buddhist fanes became Saiva temples and the Buddhist priests became Saiva ascetics or served the Saiva temples, and at the present

[1] By this is meant the great mass of the people. There have always been some with learned leisure who have adhered to the higher faith in one God and have never bowed to Siva or Vishnu, but their principles are unknown to the cultivator, the trader and the soldier, or at least only in a very diluted form.

day the forms and practices in actual use may be traced back as readily to corrupted Buddhism as to corrupted Bráhmanism. There is a period of growth and of decay in religious ideas as in all things subject to human influence, and precisely the same rules govern their rise, culmination and fall in India as in Europe. Every principle or thought that has moved the schools of Greece or Rome has equally shared the attention of Indian thinkers and in the kaleidoscopic mass of beliefs that can be studied in any considerable Indian town we may perceive analogies of the most striking character to the broad forms of belief and modes of thought in many European cities.

Religion in the Himálaya.

In discussing the history of religion in the Himálayan region we find a curious blending of pre-Bráhmanical, Bráhmanical and Buddhistic practices which it will take some time and attention to separate and ascribe to their original sources. It would doubtless be easy to dispose of the question by stating that the prevailing religion is a form of Hinduism. This would be perfectly true, but at the same time could convey no definitive idea to the reader's mind as to what the real living belief of the people is. To ascertain what is the actual state of religion, it is necessary to examine the forms and ceremonies observed in domestic and temple worship and the deities held in honour, and this is the task that we now propose to undertake for the tract between the Tons and the Káli. For this purpose we possess the results of an examination of the teaching in 350 temples in Kumaon, in about 550 temples in Garhwál and in about 100 temples in Dehra Dún and Jaunsar-Báwar. For the 900 temples in Kumaon and Garhwál we know the locality in which each is situate, the name of the deity worshipped, the broad division to which the deity belongs, the class of people who frequent the temple and the principal festivals observed. The analysis of these lists shows that there are 250 Saiva temples in Kumaon and 350 in Garhwál, and that there are but 35 Vaishnava temples in Kumaon and 61 in Garhwál. To the latter class may, however, be added 65 temples to Nágrája in Garhwál which are by common report affiliated to the Vaishnava sects, but in which Siva also has a place under the form of Bhairava. Of the Saiva temples, 130 in Garhwál and 64 in Kumaon are dedicated to the Sákti or female form

alone, but of the Vaishnava temples in both districts only eight. The Sákti form of both Siva and Vishnu, however, occurs also in the temples dedicated to Nágrája and Bhairava, or rather these deities and their Saktis are popularly held to be forms of Vishnu and Siva and their Saktis. Of the Saiva Sákti temples, 42 in Garhwál and 18 in Kumaon are dedicated to Káli, whilst the Sákti forms of the Bhairava temples are also known as emanations of Káli. Nanda comes next in popularity and then Chandika and Durga. The remaining temples are dedicated to the worship of Súrya, Ganesh and the minor deities and deified mortals and the pre-Bráhmanical village gods who will be noticed hereafter. The outcome of this examination is therefore that Siva and Vishnu and their female forms are the principal objects of worship, but with them, either as their emanations or as separate divine entities, the representatives of the polydæmonistic cults of the older tribes are objects of worship both in temples and in domestic ceremonies.

Dæmonism.

Whatever may have been the earliest form of religious belief, it is probable that it was followed by a belief in dæmons or superhuman spirits to which the term 'animism' is now applied. The Greek word 'dæmon' originally implied the possession of superior knowledge and corresponds closely to the Indian word '*bhúta*,' which is derived from a root expressing existence and is applied in the earlier works to the elements of nature and even to deities. Siva himself is called Bhutesa or 'lord of *bhúts*'. With a change of religion the word dæmon acquired an evil meaning, and similarly the word *bhúta* as applied to the village gods carries with it amongst Bráhmanists the idea of an actively malignant evil spirit. Animism implies a belief in the existence of spirits, some of whom are good and some are bad and powerful enough to compel attention through fear of their influence. They may be free to wander everywhere and be incapable of being represented by idols, or they may be held to reside in some object or body whether living or lifeless, and this object then becomes a fetish[1] endowed with power to protect or can be induced to abstain from injuring the worshipper. Examples of both these forms occur amongst the dæmonistic cults of the Indian tribes. As observed by Tiele[2] "the religions controlled by animism are

[1] See Max Müller's Hibbert Lectures, p. 56. [2] Outlines of the history of Ancient Religions, p. 10, and Wilson in J. R. A. S., V., 264.

characterised first of all by a varied, confused and indeterminate doctrine, an unorganised polydæmonism, which does not, however, exclude the belief in a supreme spirit, though in practice this commonly bears but little fruit; and in the next place by magic which but rarely rises to the level of real worship * *. In the animistic religions, fear is more powerful than any other feeling, such as gratitude or trust. The spirits and the worshippers are alike selfish. The evil spirits receive, as a rule, more homage than the good, the lower more than the higher, the local more than the remote and the special more than the general. The allotment of their rewards or punishments depends not on men's good or bad actions, but on the sacrifices and gifts which are offered to them or withheld." Even the Aryan religion held the germs of animism, but it soon developed into the polytheism of the Vedas, and this again gave rise to a caste of expounders whose sole occupation it became to collect, hand down and interpret the sacred writings and who in time invented Bráhmanism. Buddhism, as we shall see, was an off-shoot of Bráhmanism, and it is to the influence of these three forms of religious belief—Animism, Bráhmanism and Buddhism—that we owe the existing varied phases of Hinduism.

Kumaon's place in the history of religion.

In a previous chapter, the geographical and historical aspects of the sacred writings of the Hindus have been examined, and we have incidentally noticed the later development of their systems of theology. We shall now endeavour to trace back the ideas which the forms now worshipped are supposed to represent, and in doing so give some brief account of the progress of religious thought. The importance of the Kumaon Himálaya in the history of religion in India is mainly due to the existence therein of the great shrines of Badari and Kedár, containing forms of Vishnu and Siva which still hold a foremost position in the beliefs of the great majority of Hindus. To them the Kumaon Himálaya is what Palestine is to the Christian, the place where those whom the Hindu esteems most spent portions of their lives, the home of the great gods, 'the great way' to final liberation. This is a living belief and thousands every year prove their faith by visiting the shrine. The later devotional works are full of allusions to the Himálaya where Párvati was born and

became the wife of Mahádeo, and wherever a temple exists the celebrant sings the praises of Kedár and Badari, where live Mahádeo, Nanda, Náráyan and Lakshmi. To many the fruition of all earthly desires is the crowning glory of a visit to the sacred *tirtha* by which the sins of former births are cleansed and exemption from metempsychosis obtained. Here are laid many of the scenes in the lives of the deities, here Ráma propitiated Mahádeo, there with his consort Síta he wandered through the Asoka groves. Here Arjuna and Krishna meditated on the supreme being and the Pándavas ended their earthly pilgrimage. We have already seen that each rock and rivulet is dedicated to some deity or saint and has its own appropriate legend. Nature in her wildest and most rugged forms bears witness to the correctness of the belief that here is the home of 'the great god,' and when wearied with toiling through the chasms in the mountains which form the approach to the principal shrines, the traveller from the plains is told to proceed in respectful silence lest the god should be angered, he feels 'the presence.' And should the forbidden sounds of song and music arise and the god in wrath hurl down his avalanche on the offenders, then the awe-stricken pilgrim believes that he has seen his god, terrible, swift to punish, and seeks by renewed austerities to avert the god's displeasure. All the aids to worship in the shape of striking scenery, temples, mystic and gorgeous ceremonial and skilled celebrants are present, and he must indeed be dull who returns from his pilgrim unsatisfied.

In an old text of the Pádma-Purána, Krishna is made to say—'the worshippers of Siva, Súra, Ganesha and Sakti come to me as all streams flow to the ocean: for though one I am born with five-fold forms'. This distribution of orthodox Hindus into followers of Vishnu, Siva, the Sun and Ganesha is so broadly true to the present day that we may accept it for our purpose and proceed first with the history of these names. Vishnu as represented in the Vedas is distinguished from the other deities as the wide-striding—'he who strides across the heavens in three paces' which the commentators interpret as denoting the three-fold manifestation of light in the sun's daily movement, his rising, his culmination and his setting. ome other acts of even a higher character

Vishnu in the Vedas.

are also attributed to him as that—'he established the heavens and the earth to contain all the worlds in his stride.' These acts are, however, performed by him in common with all other Vaidik gods, and he nowhere attains to the importance assigned to Agni, Váyu or Súrya. The Rudra of the Vedas who, in after times, is identified with Síva or Mahádeo has no very clear functions assigned to him such as are ascribed to Agni and Indra. He is called the father of the Maruts (the winds or storms), strong, terrible and destructive. Muir writes regarding the character of this deity as shown in the Vedas :—[1]

Rudra.

"It is however principally in his relation to the good and evil which befal the persons and property of men that he is depicted. And here there can be little doubt that though he is frequently supplicated to bestow prosperity and though he is constantly addressed as the possessor of healing remedies, he is principally regarded as a malevolent deity, whose destructive shafts, the source of disease and death to man and beast, the worshipper strives by his entreaties to avert. If this view be correct, the remedies of which Rudra is the dispenser may be considered as signifying little more than the cessation of his destroying agency, and the consequent restoration to health and vigor of those victims of his ill-will who had been in danger of perishing. It may appear strange that opposite functions should thus be assigned to the same god; but evil and good, sickness and health, death and life are naturally associated as contraries, the presence of the one implying the absence of the other, and *vice versâ*; and in later times Mahádeva is in a somewhat similar manner regarded as the generator as well as the destroyer. We may add to this that while it is natural to deprecate the wrath of a deity supposed to be the destroyer, the suppliant may fear to provoke his displeasure, and to awaken his jealousy by calling on any other deity to provide a remedy. When the distinctive God has been induced to relent, to withdraw his visitation, or remove its effects, it is natural for his worshippers to represent him as gracious and benevolent, as we see done in some of the hymns to Rudra. From the above description however it will be apparent that the elder Rudra, though different in many respects from the later Mahádeva, is yet, like him, a terrible and distinctive deity; while, on the other hand, the ancient Vishnu, the same as the modern God of the same name, is represented to us as a preserver, of a benignant, or at least, of an innocuous, character."

[1] The quotations from Sanskrit works given in this chapter, unless specially noted otherwise, are taken from Muir's Original Sanskrit Texts (2nd ed.) This general acknowledgment will save much space in the foot-notes. Dr. Muir has done the greatest service possible to the history of religious thought in India in giving us translations of the actual statements contained in the best authorities. It need hardly be said that all that is attempted here is to give a summary of the connection between the religion of the past as derived from its books and that of the present day as derived from actual practice. A thorough treatment of the subject would fill several volumes.

Brahma unknown.

Brahma is not a Vaidik deity nor is there in the Vedas a trace of a triad of gods derived from one great spirit and exercising the duties of creator, preserver and destroyer. The theory of a Trinity appears to be the invention of later times and for Brahma, the moderns are obliged to refer to Visvakarma, Prajápati and Hiranyagarbha as his representative in the Vedas because these exercise similar functions in the Vaidik records. Others seek for a Vaidik triad in Agni, Váyu and Súrya and on this Professor Weber remarks :—

"The sun as the generative, creative principle is throughout the ritual-texts regarded as the equivalent of Prajápati, the father of the creation. The destructive power of fire in connection with the raging of the driving storm lies clearly enough at the foundation of the epic form of Siva. By the side of Váyu, the wind, stands his companion Indra, the lord of the light, clear, heaven; and with him again Vishnu, the lord of the Solar orb, stands in a fraternal relation. Vishnu owes to Indra his blue color, his names Vásava and Vásudeva, and his relation to the human heroes and Arjuna, Ráma, and Krishna, which have become of such great importance for his entire history."

This is, however, merely conjecture, and the general result to be drawn from these statements is that we must look to a period later than the Vedas not only for the full development of the existing systems but also of the systems on which they are based. In the Vedas there is no triad vested with separate powers, nor does Brahma appear as a deity. Vishnu, too, has little in common with the Vishnu of the Puránas. Siva[1] is not mentioned and Rudra is apparently a mere form of Agni. The linga is unknown and the female forms of Siva and Vishnu are not named : nor are Ráma and Sita, Krishna and Rádha, the favourite deities of the lower classes of the present day, alluded to. The Vedas inculcated the worship of the powers of nature as they appeared to a primitive people endowed with a deep religious sense, in the form of fire, rain, wind and sun. Gradually these were personified and endowed with human attributes and their favour was sought by presents and offerings from the flocks and products of the soil. It was not until later times that images were made and later still that they alone received the worship due to the beings represented by them. Gradually the ritualists became supreme and the due performance of the now

[1] In the Bráhmanas, Siva and Sankara occur only as appellative epithets of Rudra and never as proper names to denote him. Weber, Hist. Ind. Lit., p. 303.

intricate ceremonies in the proper place, time and form was esteemed especially necessary. This led to the institution of guilds of skilled celebrants, entrance to which was soon closed to others than those born within the family and the compilation of treatises on sacrificial ceremonies for the use of these guilds and which are known as Bráhmanas. But even in these Bráhmanas there are no traces of the modern conception of Vishnu and Síva, though we have the idea of an all-pervading spirit Brahma (a neuter word), from whom hereafter is born Brahmá (a masculine word) and his human manifestations Bráhmans.

Vishnu in the Itihása and Puránik periods.

In the preceding paragraphs we have seen that Vishnu is not the supreme god in the Vedas, nor do the earlier commentators on those works place him above the other deities. He is only once mentioned by Manu and in the older portions of the Mahábhárata and Puránas is only reckoned as one of the twelve Adityas. In the Bhágavata and Vishnu Puránas and in parts of the Mahábhárata and Rámáyana we first find him identified as one with the supreme being. The Atharva-Veda declares that Prajápati supported the world on Skambha (the supporter) and the Satapatha-Bráhmana that it was Prajápati, in the form of a tortoise, who created all things, and as Emúsha, in the form of a boar, who supported the world on his tusks. Manu states that it was Bráhma as Náráyana who created the world and the Mahábhárata that it was Prajápati who saved the world in the fish incarnation. These and other acts of the elder gods have been assigned to Vishnu in the later works specially devoted to his peculiar cult. The Matsya and Bhágavata Puránas detail his various incarnations. According to the former work it was in consequence of a curse pronounced on him by Sukra that Vishnu assumed most of these forms. Twelve times the gods fought with the Asuras, and it is related that on one occasion they were assisted by Vishnu, who, though hesitating to slay a female, was induced to kill the mother of Sukra, the chief priest of the Asuras. Sukra thereupon doomed Vishnu to be born seven times in the world of men ; 'and in consequence of this he appears for the good of the world when unrighteousness prevails.' The Matsya Purána thus enumerates these incarnations :—(1) a portion of him sprung from Dharma ; (2) the Narasinha or man-lion, and (3) the

dwarf or Vámana which are called the celestial manifestations, the remaining seven being due to Sukra's curse, *viz.*—the (4) Dattátreya, (5) Mándhátri, (6) Parasuráma, (7) Ráma, (8) Vedavyása, (9) Buddha and (10) Kalki incarnation. The Bhágavata Purána enumerates twenty-two incarnations :—Purnsha, Varáha, Nárada, Nara and Náráyana, Kapila, Dattátreya, Yajna, Rishabha, Prithu, Matsya, Kúrma, Dhanvantári, Narasinha, Vámana, Parasuráma, Vedavyása, Ráma, Balaráma, Krishna and the future incarnations as Buddha and Kalki. The same record adds that the incarnations of Vishnu are innumerable as the rivulets flowing from an inexhaustible lake." The popular belief, however, acknowledges ten only :—(1) the Matsya or fish ; (2) Kúrma or tortoise ; (3) Varáha or boar ; (4) Nara-sinha or man-lion ; (5) Vámana or dwarf : (6), Parasuráma who destroyed the Kshatriyas ; (7) Ráma who destroyed the Rákshasas ; (8) Krishna[1] ; (9) Buddha who destroyed the giants, and (10), Kalki, the incarnation of the future and whose coming brings in the Hindu millenium.

Vishnu as Ráma.

The passages of the Rámáyana which assign to Vishnu the attributes of the supreme being are chiefly connected with the preferential worship of his incarnation as Ráma. When the gods were troubled by the Rákshasa Rávan, they came to Vishnu and addressed him "as the lord of the gods," "the most excellent of the immortals," and prayed him to be born as a mortal to avenge them on their enemy. Vishnu consented and in order to accomplish the task which he had undertaken searched everywhere for a fitting vehicle for his incarnation. At this time Dasaratha, Raja of Ayodhya in the kingdom of Kosala, was engaged in a great *aswamedha* or horse-sacrifice for the sake of obtaining offspring, and by the advice of the gods, Vishnu resolved to be born in the Raja's house. He, therefore, attended the ceremony and suddenly issued from the smoke of the sacrifice as a young man bearing a jar of nectar which he, at once, presented to the wives of Dasaratha. To Kausalya he gave one-half and she bare Ráma, and the remainder was equally divided between Sumitra and Kaikeyi, the other wives of Dasaratha. Lakshmana and Satrughna were in consequence born to Sumitra and Bharata to Kaikeyi. Though this history would lead us to suppose that

[1] According to many lists Balaráma, who destroyed Pralambha, is here substituted for Krishna, who is believed to have been Vishnu himself.

Ráma was only a partial manifestation[1] of the deity, the later records devoted to his cult ascribe to him almost exclusively all the attributes of the god. In another passage from the same work we are told of the interview between Ráma and Parasuráma also supposed to be an incarnation of Vishnu and how the latter deity recognises Rama as "the lord of the gods" and suffers the destruction of his "blissful abodes" at Ráma's hands as evidence of his inferiority.[2] In the episode of the ordeal of Síta on her return from Lanka, Ráma is again invested with the attributes of the supreme being. It is then told how the gods, including even the 'three-eyed' Mahádeva, assembled and remonstrated with Raghava (Ráma) on account of his doubts concerning Síta and his conduct towards her. They addressed him as 'the maker of the whole universe,' 'the chief of the host of gods,' and Ráma, in reply said :— "I regard myself as a man, Ráma son of Dasaratha, do you tell me who I am and whence I am." Brahma answers :—

"Hear my true word, o being of genuine power, Thou art the god, the glorious lord, Náráyana armed with the discus. Thou art the one-horned boar, the conqueror of thy foes, past and future, the true, imperishable Brahma both in the middle and end. Thou art the supreme righteousness of the worlds, the Visvasena, the four-armed, the bearer of the bow Sárnga, Hrishíkesa, Purusha, Purushottama, the unconquered, sword-wielding Vishnu and Krishna of mighty force. Thou art the source of being and cause of destruction, Upendra (the younger Indra) and Madhusudana. Thou art Mahendra (the elder Indra) fulfilling the function of Indra, he, from whose navel springs a lotus, the ender of battles."

Vishnu as Krishna.

In the Rámáyana, as we have seen, Vishnu is identified with Ráma and, in the same manner, in the Mahábhárata and the Vaishnava Puránas, he is identified with Krishna, the most popular of all the incarnations. The name Krishna nowhere occurs in the Vedas and in the earliest text[3] in which it appears, he is simply called, 'the son of Devaki.' Throughout the later records he is variously represented as a mere mortal hero, as a partial incarnation of Vishnu and inferior to

[1] Some works differentiate the divine essence in the several human incarnations thus :—Krishna, full incarnation ; Ráma, half ; Bharata, Ráma's brother ; one quarter ; Ráma's two other brothers one-eighth ; and other holy men, various appreciable atoms. [2] Lassen, as noted hereafter, supposes this to be an interpolation, and Muir adduces further arguments in support of the suggestion that Ráma may not have been originally represented in the Rámáyana as an incarnation of Vishnu: IV., 441 ; so also Weber, Hist. Ind. Lit., 194. [3] See Weber, Hist. Ind. Lit., 71, 169.

the other gods and as one with the supreme being and chief of all gods. In one passage of the Mahábhárata, Krishna with Arjuna are represented as supplicating Mahádeva for the grant of a weapon wherewith Arjuna might slay Jayadratha,[1] thus implying the superiority of Mahádeva. Subsequently, as remarked by Muir, Krishna "explains away the worship which here and elsewhere he is said to have rendered to Mahádeva by saying that it was done for the sake of example to others and was in reality offered to himself, Mahádeva being one of his manifestations and in fact one with him. But no hint is given of it here." Here Arjuna and Krishna as Nara and Náráyana appear before Mahádeva, who receives them as if smiling and says:—"Welcome, most eminent of men, rise up from your fatigue and tell me quickly, heroes, what your minds desire." In reply, they first recite a hymn in praise of Mahádeva and then Arjuna, after due reverence to both Krishna and Mahádeva, asks from Mahádeva a bow which he ultimately obtains. In another passage Mahádeva says:—"I have been duly worshipped by Krishna * * wherefore no one is dearer to me than Krishna." Further it is said that it was owing to 'a twelve years' fasting and mortification and worship of Mahádeva' that Krishna was allowed to have offspring by Rukmini. Another wife of his, named Jámbavati, quotes this story, and prays him to intercede for her also with Mahádeva. For this purpose Krishna visited the sage Upamanyu in his hermitage in the Himálaya and from him hears many stories in praise of Mahádeva, and eventually sees the god himself in a dream. Krishna then worships Mahádeva and his consort Párvati and obtains all that he desires. In another passage Krishna is introduced as recommending the worship of Durga to Arjuna when about to contend against the host of Dhritaráshtra. And again, Bhíshma declares his inability to describe "the attributes of the wise Mahádeva, the lord of Brahma, Vishnu and Indra. * * Through his devotion to Rudra, the world is pervaded by the mighty Krishna. Having propitiated Mahádeva at Badari, Krishna obtained from the golden-eyed Mahesvara the quality of being in all worlds more dear than wealth. Thus Krishna performed austerity for full one thousand years, propitiating Siva the god who bestows boons and the preceptor of the world."

[1] Wilson, III., 300.

We also find in the Mahábhárata that the position of Krishna was not then quite assured and that there were not wanting those who denied him other than mortal origin. When Yuddhishthira desired to perform the great *rájasúya* sacrifice, numerous princes assembled to assist at the ceremony and amongst them Krishna and Sisupála, lord of the Chedis. Bhíshma,[1] proposed that Krishna should have honour above all the princes assembled as the most eminent of the chiefs, but Sisupála interposed and said that Krishna "was not a king or a person venerable from his age, his father Vásudeva being still alive * * that in other respects he was inferior to the other chiefs present. * * and was elated with the undeserved honour that had been paid him like a dog devouring in a secret place the leavings of an oblation which he has discovered."[2] Bhíshma then defends the claims of Krishna and says that it is from no interested motives that Krishna is held worthy of worship, but from knowing his renown, heroism and victories, in knowledge excelling the Brahmans and in valour, the Kshatriyas. Wisdom and strength are here given as the motives for paying peculiar honour to Krishna and he is not regarded as endowed with superhuman faculties, but in the concluding portion of the same speech we have him one with matter (*prakriti*), the eternal maker, him upon whom whatever is fourfold exists, the chief of gods. With regard to this passage so different from the narrative character of what precedes and follows, Muir justly remarks:—"It is possible that the whole of this description of his (Krishna's) qualities may not be of one age, but may contain interpolations subsequently introduced." Sisupála retorts on Bhíshma and charges him with being the victim of delusion, a blind leader of the blind, eager to eulogize a cowherd who ought to be vilified by even the silliest of men. He then recapitulates the feats of Krishna regarding which they had all heard so much from Bhíshma, and says:—"If in his childhood he slew Sakuni[2] or the horse and bull who had no skill in fighting,

Sisupála opposes Krishna.

[1] It was customary at the *rájasúya* for the ruler of the feast to declare who was the greatest amongst those assembled and to offer him a gift (*argha*) as a token of respect. [2] In the Vishnu Puráṇa (Wilson, IX., 276) it is told how the child Krishna while asleep was visited by Pútana, the child-killer:—"Now whatever child is suckled, in the night, by Pútana instantly dies, but Krishna laying hold of the breast with both hands, suckled it with such violence" that Pútana died. Sakuni was also killed by him whilst a child.

what wonder? If a waggon,[1] an inanimate piece of wood, was upset by him with his foot, what wonderful thing did he do? * * and it is no great miracle, o Bhíshma, thou judge of duty, that he slew Kansa,[2] the powerful king whose food he had eaten. Hast thou not heard virtuous men declaring this which I shall tell thee, who art ignorant of duty, Bhíshma, thou basest of the tribe of Kurus?—'Let no one smite with his weapons, women, cattle or Brahmans, or him whose food he eats, or on whom he is dependent.' * * Thou basest of the Kurus, eulogizing, speakest of Keshava (Krishna) as old in knowledge and mature and superior as if I did not know him. If he, being a slayer of cattle and of women, is, according to thy word, to be reverenced,—how, Bhíshma, can such a person merit encomium?" Bhíshma then describes the birth of Sisupála and his many offences and how he had already been pardoned by Krishna and that relying on the clemency of Govinda (Krishna) he still persisted in his insolence. Sisupála, nothing daunted, again asked why Krishna should be so praised to the exclusion of all other kings, and Bhíshma again and again defended his favourite and said that in comparison with Krishna all other chiefs were as nothing. On hearing this, some of them rising up in great wrath demanded the instant punishment of Bhíshma and Sisupála himself challenged Krishna to fight. Before the combat commenced, Krishna addressed the assembly recounting the evil deeds of Sisupála and wound up with the taunt that Sisupála had sought Rukmini,[3] "but the fool did not obtain her, as a Sudra is excluded from the Veda." Sisupála replied that no one but Krishna would mention among respectable females a woman who had been betrothed to another and so angered Krishna that he called out to the assembly: 'Let the king listen to me by whom this forgiveness has been practised. At the request of his mother, a hundred offences were to be pardoned. That request was granted by me and it has

[1] One night whilst asleep under the waggon Krishna cried for the breast and not being attended to immediately, kicking up his feet, he overturned the vehicle (*Ibid.*, 279). [2] Krishna was born as the son of Vásudeva and Devaki in the realms of the Raja Kansa, who having heard that a child was born who should take away his life, like Herod, gave orders that all male children should be destroyed. The gods had induced Vishnu to be born as Krishna in order to slay Kansa, and while a child Krishna lived concealed in the family of the cowherd Nanda and his wife Yasoda at Mathura, and when he grew up to man's estate, he slew Kansa (*Ibid.*, V., 41). [3] Rukmini was the daughter of Bhíshmaka, king of Kundina in the country of Vidarbha (Berar), and was betrothed to Sisupála, king of Chedi, but was carried off by Krishna, on the eve of the wedding.

been fulfilled, o kings. I shall now slay him,' and having thus spoken, Krishna struck off the head of Sisupála with his discus.

Duryodhana, also, the great champion of the Kauravas, notwithstanding the eloquent pleading of Sanjaya, declined to acknowledge the superiority of Krishna and when again he attempted to arrange a plot for the capture of Krishna, was warned by Vidura that his efforts would be fruitless owing to the divine character of Krishna, he still stubbornly declined to admit the celestial origin of his enemy and persuaded Sálya, king of the Madras, to accept the office of charioteer to Karna in the combat with Arjuna, whose chariot was driven by Krishna. In the course of the arguments adduced to convince the Madra prince, Duryodhana calls him the equal of Sauri (Krishna) and says that Brahma acted in the capacity of charioteer to Mahádeva in his great fight with the sons of the Asura Táraka, and further:—"Thou art a spear (*salya*) to pierce thine enemies, irresistible in valour: hence, o king, destroyer of thy foes, thou art called Sálya. * * But (it is said that) Krishna is superior in force to the strength of the arm. Just as great strength is to be exhibited by Krishna, if Arjuna were killed; so is great strength to be put forth by thee if Karna be slain. Why should Krishna withstand our army? and why shouldst not thou slay the enemy's host?" In the combat that ensued, the wheel of Karna's chariot sank deeply into the earth and Karna was slain by Arjuna. Sálya survived and was elected general of the Kauravas on the last day of the great war, when he, also, perished at the hands of Yuddhishthira.

Duryodhana, Sálya and Karna.

In several passages, Krishna is spoken of as only a partial incarnation of the godhead: thus in the Vishnu Purána itself, Maitreya[1] asks an account "of the portion of Vishnu that came down upon earth and was born in the family of Yadu. Tell me also what actions he performed in his descent as a part of a part of the supreme, upon the earth." The commentator on this passage maintains that "this limitation extends only to his form or condition as man, not to his power; as light, by suffusion, suffers no decrease. Krishna is, nevertheless, the supreme Brahma, though it be a mystery how the supreme should assume the form of a man." In a passage of the Bhágavata

Krishna, a partial incarnation of Vishnu.

[1] Wilson, IX., 247.

Puráṇa, Brahma addresses the gods and says:—"Do you, in portions of yourselves, be born among the Yadus, whilst he, the god of gods, walks upon the earth, removing her burden by his destructive power. The supreme divine Purusha shall be born in his own person in the house of Vásudeva." Again, in the Vishnu Puráṇa, in describing the circumstances which led to the incarnation of Vishnu as Krishna, Brahma addresses the gods and asks them to accompany him to the northern coast of the milky sea where is Hari, who "constantly, for the sake of the earth, descends in a small portion of his essence to establish righteousness below." They then ask Hari to assist them and "he plucked off two hairs, one white and one black, and said to the gods: These my hairs shall descend upon the earth and shall relieve her of the burthen of her distress." The black hair was destined to be born as Krishna in order to destroy Kansa, the incarnation of the demon, Kálanemi. The same story is told in the Mahábhárata how "Hari plucked out two hairs, one white and the other black. These two hairs entered into two women of the tribe of the Yadus, Devaki and Rohini. One of them, the white hair of the god, became Baladeva; while the second hair (*Kesha*), which was called black (*Krishna*) in colour, became Krishna or Kesava." Here again the commentator explains the passage as in no way detracting from the godship of Krishna. He is not sprung from his putative father Vásudeva, but the hairs, representing the manifestation of the deity in all his plenitude, entered at once into the wombs of Devaki and Rohini and became the media through which they conceived.

Nara and Náráyana.

The great peak above the Badrináth temple is called Nar-Náráyan after Arjuna and Krishna, who are represented in many passages of the Mahábhárata as having formerly existed in the persons of the two Rishis Nara and Náráyana. Krishna himself, when he visited the Pándavas in their exile, addresses Arjuna and says:—"Thou invincible hero, art Nara and I am Hari Náráyana: in due time we came into the world, the Rishis Nara and Náráyana. Thou, son of Pritha, art not different from me, nor I, in like manner, from thee; no distinction can be conceived between us." When Arjuna sought the *pásupata* weapon from Mahádeva and met him in the

forests of the Himálaya, the latter addressed Arjuna as Nara, the companion of Náráyana, who together for so many years performed austerities at Badari[1] and the local legends place the scene of this meeting at Bhilwa Kedár near Srinagar. Again Bhishma when warning Duryodhana against Krishna relates how when oppressed by the Daityas, the gods had recourse to Pitámaha he referred them to the great Rishis Nara and Náráyana and they consented to aid the gods and slew the Daityas. He adds:—"Thus behold those twain arrived—those twain who are of so great strength, Vásudeva and Arjuna, united together, riders on great cars, Nara and Náráyana, the deities, the ancient deities as it is reported, invincible in the world of mortals even by Indra and other gods and Asuras. This Náráyana is Krishna and Nara is called Phálguna (Arjuna). Náráyana and Nara are one being, divided into twain." In the great contest with Mahádeva noticed elsewhere, Vishnu appears as Náráyana and it is to this form that the majority of the strictly orthodox Vaishnava temples is dedicated in Garhwál. Muir writes[2] thus regarding this manifestation: "The identification of Arjuna and Krishna with the saints Nara and Náráyana is curious; but I am unable to conjecture whether it may have originated in a previously existing legend respecting two Rishis of that name (the one of whom, as bearing the same name which was ultimately applied to Vishnu and Krishna was, in the fanciful spirit of Indian mythology, and in consonance with the tenet of metempsychosis, declared to have been an earlier manifestation of Krishna,—whilst Arjuna, the bosom friend of the latter, would naturally be regarded as the same with Nara, the inseparable companion of Náráyana), or whether the whole legend was originally invented for the glorification of Krishna and Arjuna."

Krishna the supreme.

Besides those passages of the Mahábhárata in which Krishna is represented as one with Vishnu and therefore one with the supreme being, there are others in which the supreme attributes are ascribed to Krishna himself. During the interview between Arjuna and Krishna in the forests of the Himálaya which has already been alluded to as an extract from the *Vana-parvan* of the Mahábhárata, Arjuna recounts

[1] The sage Nárada also visited the Rishis whilst at Badari and recollected to have seen them in Sveta Dwípa, where 'was the supreme being whose forms and distinguishing marks they now bore.' [2] IV., 282.

the exploits of Krishna in his former births, his austerities as Náráyana, his slaughter of the enemies of the gods, his various forms and his three strides as the son of Aditi. In the course of his speech, Arjuna addresses Krishna as—"Thou being Náráyana, wert Hari, o vexer of thy foes. Thou, o Purushottama art Brahma, Soma, Súrya, Dharma, Dhátri, Yama, Anala, Váyu, Kuvera Rudra, Time, Sky, Earth, the Regions, the unborn, the lord of the world, the creator." * * * "At the commencement of the Yuga, o Varshneya (Krishna), Brahma, the chief of things moveable and immoveable, whose is all this world sprung from the lotus issuing from thy navel. Two horrible Dánavas, Madhu and Kaitabha, were ready to slay him. From the forehead of Hari, who became incensed when he saw their transgression, was produced Sambhu (Mahádeva) wielding the trident and three-eyed. Thus even these two lords of the gods (Brahma and Mahádeva) are sprung from thy (Krishna's) body." In describing the appearance of Krishna when rebuking Duryodhana for his attempted treachery it is said that:—"as the mighty descendant of Súra (Krishna) smiled, the god wearing the appearance of lightning, of the size of a thumb, and luminous as fire, issued forth from him. Brahma occupied his forehead, Rudra (Siva) was produced on his chest, the guardians of the world (*lokapálás*) appeared on his arms and Agni sprung from his mouth. The Adityas, too, and the Sádhyas, Vasus, Asvins, Maruts, and all the gods along with Indra were produced and also the forms of the Yakshas, Gandharvas and Rákshasas. Sankarshana and Dhananjaya also were manifested from his arms, Arjuna armed with a bow from his right, Ráma holding a plough from his left, Yuddhishthira and Bhíma, the sons of Mádri, from his back. Next Andhakas and Vrishnis, headed by Pradyumna, arose on his front, with their weapons ready. A shell, discus, club, spear, bow, plough, and sword were seen prepared, and all weapons, gleaming in every form on the different arms of Krishna."

Mahádeva glorifies Krishna.

In another passage where Mahádeva is asked to explain the ground on which Krishna is said to be entitled to worship, he is made to say:—"Superior even to Pitámaha is Hari, the eternal spirit, Krishna brilliant as gold, like the sun risen in a cloudless sky, ten-armed, of mighty force, slayer of the foes of the gods, marked with the

srívatsa, Hrishíkesa, adored by all the gods. Brahma is sprung from his belly and I (Mahádeva) from his head, the luminaries from the hair of his head, the gods and Asuras from the hairs of his body, and the Rishis, as well as the everlasting worlds, have been produced from his body. He is the manifest abode of Pitámaha (Brahma) and of all the deities. He is the creator of this entire earth, the lord of the three worlds, and the destroyer of creatures, of the stationary and the moveable. He is manifestly the most eminent of the gods, the lord of the deities. * * The slayer of Madhu[1] is eternal, renowned as Govinda. * * This god is the lotus-eyed, the producer of Srí,[2] dwelling together with Srí. Again Bhíshma informs Yuddhishthira how—

"Krishna created the earth, the air and the sky: from Krishna's body the earth was produced. He is the ancient hero of fearful strength; he created the mountains and the regions. Beneath him are the atmosphere and the heaven, the four regions and the four intermediate regions; and from him this creation sprang forth. * * Becoming Váyu, he dissipates this universe; becoming fire he burns it, universal in his forms; becoming water he drowns all things; becoming Brahma, he creates all the hosts of beings. He is whatever is to be known, and he makes known whatever is to be known; he is the rule for performance, and he who exists in that which is to be performed."

Krishna praises himself.

Krishna is also addressed by Yuddhishthira as Vishnu, the three-eyed Sambhu (Mahádeva), Agni and the Bull, the maker of all. Again Krishna declares that Brahma was produced from his good pleasure and Mahádeva from his anger, that they are one with him and therefore to be worshipped as part of himself who is revered by all the gods, Brahma, Rudra, Indra and the Rishis. He goes on to say:—

"For when that god of gods Maheshvara is worshipped, then, son of Pritha, the god Náráyana, the lord, will also be worshipped. I am the soul of all the worlds. It was therefore myself whom I formerly worshipped as Rudra. If I were not to worship Isána, the boon-bestowing Siva, no one would worship myself. An authoritative example is set by me which the world follows. Authoritative examples are to be reverenced, hence I reverence him (Siva). He who knows him knows me; he who loves him loves me. Rudra and Náráyana, one essence, divided into two, operate in the world, in a manifested form, in all acts. Reflecting in my mind that no boon could be conferred upon me by any one, I yet adored the ancient Rudra, the lord, that is, I, with myself adored myself, to obtain a son. For Vishnu does not do homage to any god, excepting himself: hence I, in this sense, worship Rudra."

[1] The Dánava of that name. [2] For an account of the production of Srí from the churning of the ocean, see Wilson, VI., 144

Bhíshma, too, when warning Duryodhana of the hopelessness of contending against Krishna, relates how Brahma celebrated the praises of Krishna in a hymn and entreated him to appear on earth in the family of Yadu and how the god consented. Brahma thus describes the interview:—"the lord of the world was entreated by me to show favour to the world (in these words) :—

Brahma praises Krishna.

"Do thou, celebrated as Vásudeva, appear in the world of men: be born on earth for the slaughter of the Asuras. * * He of whom I Brahma, the master of the whole world am the son, that Vásudeva, the lord of all the worlds, is to be propitiated by you. Never, oh most excellent deities, is the potent bearer of the shell, the discus, and the club, to be slighted as a mere man. This Being is the highest mystery, this the highest existence, this the highest Brahma, this the highest renown. This Being is the undecaying, the undiscernible, the eternal. This Being which is called Purusha is hymned and is not known. This Being is celebrated by Visvakarman as the highest power, as the highest joy, and as the highest truth. Wherefore Vásudeva of boundless might is not to be contemned by the deities, including Indra, or by the Asuras, as a mere man. Whosoever says that he is a mere man is dull of comprehension; from his contempt of Hrishíkesa they call such a person the lowest of men. Whoever despises Vásudeva, that great contemplator who has entered a human body, men call that person one full of darkness."

The exploits of Krishna are recounted in several passages of the Mahábhárata by Arjuna, Bhíshma, Dhritaráshtra and even Krishna himself.[1] He is recorded as the conqueror of the bull-demon Arishta who terrified the kine and destroyed hermits and ascetics.[2] He slew Pralambha who attempted to run away with Balaráma.[3] When he appeared with Arjuna to aid the gods in their battles with the demons, "he cut off the head of Jambha who was swallowing up Arjuna in battle." He slew the great Asura Pítha, and Mura 'resembling the immortals' and the Rákshasa Ogha. He attacked Nirmochana and there slew numbers of Asuras, having violently cut asunder the nooses.[4] He next attacked Naraka in the Asura castle of Prágjyotisha (Asám) and recovered the jewelled earrings of Aditi.[5] So, too, Kansa, though supported by Jarásandha, was slain. "Sunáman, valiant in fight, the lord of a complete army, the brother of Kansa, who interposed for the king of the Bhojas, the bold

Exploits of Krishna.

[1] Muir, IV., 229-253. [2] Wilson, IX., 333. [3] *Ibid.*, 305, where Balaráma is said to have squeezed the demon to death by direction of Krishna. [4] See note Muir, *l. c.* 250, where a connection is traced to the nooses used by Thags. [5] A detailed account of this feat is given in Wilson, IX., 85.

and heroic prince of the Súrasenas, was, with his army, burnt up in battle by Krishna, destroyer of his enemies, seconded by Balaráma.[1] * * Krishna, by a clever device, caused Jarásandha,[2] the large armed, lord of a complete army, to be slain. This hero also slaughtered like a beast, the king of the Chedis (Sisupála), who quarrelled regarding the offering." He captured and threw down Saubha, the flying city of the Daityas on the shore of the ocean; though protected by the Sálya king so terrible from his magical powers and by the weapon *sataghni*[3] which was arrested at the gate itself by his arms. He destroyed Pútana and Sakuni, the daughters of the Daitya leader Bali. He killed Pándya[4] with a fragment of a door and crushed the Kalingas in Dantakúra and slew Ekalavya,[5] king of the Nishádas, with a fragment of a rock. Rukmini, the betrothed of Sisupála, lord of the Chedis, was visiting a temple on the eve of her nuptials when she was seen by Krishna, who carried her off with him to the city of Dwáraka and there married her.[6] Through him the city of Benares, which had been burned and remained for many years defenceless, sprang into existence.[7] Nagnajít Raja of Gandhára or Peshawar "had offspring born to him who became enemies of righteousness" and Krishna destroyed them and carried off the daughter of the king.[8] At Prabhása or Somnáth, he encountered the demon Panchajana, who lived in the depths of ocean in the form of a conch-shell, and having slain him took the conch-shell and ever after bore it as his horn.[9] He obtained the discus, after propitiating Agni in the Khándava forest or, according to another account. "That discus fiery and resplendent which was formerly given to thee (Vishnu) by the god after slaying the marine monster (Panchajana) and the Daitya proud of his strength, was produced by Mahádeva." He then brought back the *párijáta* tree from Indra's heaven to Dwáraka.[10] In consequence of these good acts, the gods conferred on Krishna

[1] *Ibid.*, X., 41; both Sunáman and Kansa were killed on the same day and their father Ugrasena was made king in their stead; by the Raja of the Bhojas, Kansa is intended, *ibid*, IX., 260. [2] Krishna had recourse to the four devices of policy, or negotiation, presents, sowing dissensions and chastisement and sometimes even betook himself to flight." Jarásandha was king of Magadha. [3] Supposed to be a sort of rocket. [4] A prince of the Dakhin country of Pándya. [5] See Wilson, IX., 113; X., 123, which make him son of Devasravas, brother of Vásudeva [6] Wilson, X., 70. [7] For an account of the burning of Benares by Krishna himself, see *ibid.*, 128. [8] Lassen thinks that this story has some foundation in fact. [9] Wilson, *ibid.*, 48: according to the Mahábhárata, Panchajana lived in Pátála. [10] *Ibid.*, 104.

these boons:—"Let no fatigue oppress thee when thou art fighting, let thy step traverse the sky and the waters, and let no weapon make any impression on thy body." Throughout these laudatory accounts of the exploits of Krishna, he is depicted as a hero of great valour and strength, but not necessarily as the supreme deity, and at the close of the speech he is recorded as receiving boons from the gods. Besides the feats recorded in the Mahábhárata, there are others given in the Puránas[1] which do not occur in the older work and are embellished with more supernatural occurrences. We have thus briefly sketched the history of the two forms Krishna and Ráma under which Vishnu is worshipped at the present day. They are totally unconnected with the Vedas and are pûrely popular inventions produced on Indian soil to glorify the lunar and solar races respectively, and are probably nothing more than advanced dæmonism on which the ever-willing priests have engrafted as much as they could of Vaidik ceremonial and ritual.

The later Rudra.

We have already seen that there is little connection between the elder Rudra of the Vedas and the modern Rudra of the Itihása period beyond the quality common to both of fierceness. In some of the later Vaidik writings, however, Rudra is identified with Agni, and if we bear in mind this fact and accept the later Rudra as the representative of the two gods, much light will be thrown on the otherwise conflicting characters given to him. This theory of the dual origin of the later Rudra has the high authority of Professor Weber.[2] In his explanation of the great Rudra-book, the *Satarudriya*, he points out that the Brahmans, terrified at the howling hungry flame of the sacrifice which is conceived of as in the form of Rudra, propitiate it with offerings. Now this was as an adaptation of the original idea of Rudra as the howling storm and now the crackling flame. Flame the cause of wind, and wind the cause of flame, unitedly forming the one great terrible being. Hence the epithets assigned to him in the *Satarudriya* are separable into two classes. Those which make him 'the dweller in the mountains' (*Girisa*), 'with spirally braided hair' (*Kapardin*), 'having dishevelled hair'

[1] See Wilson IX., 245-342; X, 1-167.

[2] This may be taken as a probable explanation of the working of the minds of the Brahmans of the esoteric school in developing the old ideas to meet the requirements of the day, but there is nothing to show that it was understood or accepted by the masses.

(*Vyupta-kesa*), 'cruel' (*Ugra*), 'fierce' (*Bhíma*), 'healer' (*Bhishój*), auspicious' (*Siva*) and 'progenitor' (*Sambhu*) are derived from his character as 'lord of storms,' and those such as 'blue-necked' (*nílagríva*), like wreathed smoke, 'golden-armed' (*Hiranya-báhu*), and 'thousand-eyed' (*Sahasráksha*) like sparks, belong to him as 'lord of fire.' In the older writings there is no trace of his names Isa or Mahádeva or of his form as the Linga or Phallus.

Mahádeva.

In the Mahábhárata, Duryodhana relates how the gods went to Siva and implored his aid against the Dánavas and how he answered that he would give them half his strength and then they should be successful. The gods replied that they could not sustain half his strength, but that they would give him half their strength. To this Siva consented and became stronger than all the gods and was thenceforth called Mahádeva, 'the great god.' In another work it is said that:—"He who, abandoning all forms of being, exults in the great divine power of absorption in the knowledge of himself is therefore called Mahádeva." The sage Upamanyu to whom Krishna went for advice when he desired offspring though Jámbavati thus recounts the characteristics of Mahádeva as told him by his mother:—"He (Mahádeva) assumes many forms of gods, men, goblins, demons, barbarians, tame and wild beasts, birds, reptiles, and fishes. He carries a discus, trident, club, sword and axe. He has a girdle of serpents, earrings of serpents, a sacrificial cord of serpents and an outer garment of serpents' skins. He laughs, sings, dances and plays various musical instruments. He leaps, gapes, weeps, causes others to weep, speaks like a madman or a drunkard as well as in sweet tones. *Ingenti membro virili præditus* he dallies with the wives and daughters of the Rishis." Such is the description of the god given by a female devotee to her son who himself was also an ardent disciple. Upamanyu then relates how he worshipped the god with great austerities and obtained the boon of the god's perpetual presence near his hermitage in the Himálaya. He also tells the story of the Rishi Tandi who had lauded Mahádeva as the supreme deity whom even Brahma, Indra and Vishnu did not perfectly know. In another passage Krishna describes Siva as:—"Rudra with braided hair, and matted locks, shaven, the frequenter of cemeteries, the performer of awful rites, the devotee, the very

terrible." Nárada again relates how he saw Párvati and Mahádeva in their home on the Himálaya with their attendant demons (Bhútas) and nymphs (Apsarases). Both were clothed in the skins of wild beasts and the sacrificial cord of Mahádeva was formed from a serpent. Daksha, the father-in-law of Siva, thus describes the god :—" He roams about in dreadful cemeteries, attended by hosts of goblins and spirits, like a madman, naked, with dishevelled hair, laughing, weeping, bathed in the ashes of funeral piles, wearing a garland of skulls and ornaments of human bones, insane, beloved by the insane, the lord of beings whose nature is essentially darkness." He is also described in another passage as " bearing the Linga desired by devotees, ashes, a staff, a tuft of hair, an antelope's skin and a digit of the moon, his body shining like an evening cloud."

Interpolations in the epic poems.

Many of the contradictions observed in the epic poems in regard to the relative importance of the two great gods and their manifestations are undoubtedly due to the interpolations made by the followers of either. Professor Goldstücker has recorded that in its present state the Mahábhárata is clearly " a collection of literary products belonging to widely distant periods of Hindu literature." Professor Wilson also considers the same work as belonging to various periods. Lassen is of the same opinion and writes :—

" It is true that in the epic poems, Ráma and Krishna appear as incarnations of Vishnu, but they, at the same time, come before us as human heroes and these two characters are so far from being inseparably blended together that both of these heroes are for the most part exhibited in no higher light than other highly gifted men—acting according to human motives and taking no advantage of their divine superiority. It is only in certain sections which have been added for the purpose of enforcing their divine character that they take the character of Vishnu. It is impossible to read either of these poems with attention, without being reminded of the later interpolation of such sections as ascribe a divine character to the heroes and of the unskilful manner in which these passages are often introduced and without observing how loosely they are connected with the rest of the narrative and how unnecessary they are for its progress."

The same writer agrees with Schlegel that the chapters in which Ráma is represented as an incarnation of Vishnu and the episode of the contest between Parasuráma and Ráma are both interpolations. Muir also concurs in this judgment and thinks that there is nothing to show that the passages lauding Mahádeva bear the

impress of a greater antiquity than those which extol Krishna. He adds :—

"Both in their present form at least, appear to belong to the same age, as we find in both the same tendency to identify the god who is the object of adoration with the supreme soul. The passages relating to both gods, as they now stand, would seem to be the products of a sectarian spirit, and to have been introduced into the poem by the Saivas and the Vaishnavas for the purpose of upholding the honor of their respective deities. But on the other hand the mere fact that a poem in which Krishna plays throughout so prominent a part, and which in its existing form is so largely devoted to his glorification, should at the same time contain so many passages which formally extol the greatness, and still more which incidentally refer to a frequent adoration, of the rival deity, by the different personages, whether contemporary or of earlier date, who are introduced, this fact is, I think, a proof that the worship of the latter (Mahádeva) was widely diffused, if indeed it was not the predominant worship in India, at the period to which the action of the poem is referred."

Weber[1] thinks that the deeds and downfall of Janamejaya formed the original plot of the Mahábhárata and that with them the current myths and legends relating to the gods became linked in the popular legend and have now become so interwoven that the unravelling of the respective elements must ever remain an impossibility. "As to the period when the final redaction of the entire work in its present shape took place no approach even to a direct conjecture is possible : but at any rate it must have been some centuries after the commencement of our era." There is not wanting evidence to show that this branching off of Brahmanism into two great lines, the one, Vaishnavism, representing conservative thought and the predominating influence of the priestly caste and supporting caste and its distinctions, and the other Saivism, borrowing largely from local cults, taking into its pale the aboriginal tribes and their village deities and inclined therefore to be careless in matters of caste and ceremonial and neglectful of the priestly class, was attended with considerable friction. Saivism readily lent itself to the corrupted Buddhism around it and with Buddhism was early tainted with the Sákta doctrines which in the Tantras of both sects have attained to such development. The Vaishnavas on the other hand have always retained more of the ancient landmarks in their teachings. They have admitted less of the aboriginal element, and though Nágrája is held to be a Vaishnava emanation, he

[1] Hist. Ind. Lit., 187-88.

is not recognised by the orthodox. Sáktism never developed itself to the same extent amongst the Vaishnavas as a body, though even here the practices of certain sections are quite on a level with those of the most degraded of the Saivas. It is not, however, to be supposed that Vaishnavas and Saivas are distinct sects. It is common for a man to reverence and worship all the five divisions, Siva, Vishnu, Surya, Ganesha and Sakti, and to have one as his favourite deity (*ishta-dêbta*). In most temples all are represented and the worshipper pays his devotions in the chapel or shrine he most cares for. Temples devoted to particular forms must have some peculiar sanctity attached to them to attract votaries and are seldom visited except on festivals.

Contest between the Saivas and Vaishnavas.

A careful examination of the stories which are common to both Saiva and Vaishnava works and those which have evidently been added for the mere purpose of advocating the preferential claims of either god discloses the existence of a contest between the followers of Vishnu and Siva, and also an attempt at reconciliation by declaring the one god to be the same as the other, and therefore that both should be equally an object of adoration to the devout. We shall now briefly summarise the passages which seem to indicate the existence of strife between the followers of the two great gods. In the Rámáyana we are told how the artificer of the gods made two great bows, one of which he presented to Mahádeva and the other to Vishnu. The bow of Siva was placed in charge of Janaka the king of Mithila, and Ráma in his travels tried the bow and broke it. Parasuráma, who is also supposed to be an incarnation of Vishnu, heard of this exploit and visited Ráma and produced the bow of Vishnu. He then challenged Ráma to bend this bow and fit an arrow on the string and declared that if Ráma succeeded in doing so, they should then decide their respective claims to superiority in single combat. The gods had all along been desirous of finding out the strength and weakness of Mahádeva and Vishnu and asked Brahma to assist them. "Brahma, most excellent of the three, learning the purpose of the gods, created discord between the two. In this state of enmity a great and terrible fight ensued between Mahádeva and Vishnu, each of whom was eager to conquer the other. Siva's

Ráma.

bow[1] of dreadful power was then relaxed and the two deities being entreated by the assembled gods, became pacified." Here we have Siva and Vishnu actually contending with each other and the victory remaining with Vishnu, and though Ráma succeeded in conquering Parasuráma, yet both are emanations of the one divine person, Vishnu.

Daksha's sacrifice.

The fact that the worship of Siva was the cause of much controversy and the object of considerable opposition is more clearly brought out in the story of Daksha's sacrifice which is related in both the great epic poems and in several of the Puránas. In the Rámáyana it is simply stated that Rudra enraged at not receiving a share of the sacrifice wounded the assembled gods with his bow and, on their submission, restored them to their former condition. In the Mahábhárata there are three separate accounts of the sacrifice. In one Uma, the wife of Siva, sees the gods go by to the sacrifice and asks her husband why he does not go. He replies:—"The former practice of the gods has been, that in all sacrifices no portion should be divided to me. By custom, established by the earliest arrangement, the gods lawfully allot me no share in the sacrifice." Uma angry for the dignity of her lord urges him to go and destroy the sacrifice, which he does and Brahma, on the part of the gods, promises that he shall ever afterwards receive a share. A second version makes the sage Dadhíchi the one to incite Rudra to interfere with the sacrifice. Dadhíchi was present and declared that it was impossible for the sacrifice to proceed unless Rudra were invited. Daksha replied:—"We have many Rudras, armed with tridents, and wearing spirally-braided hair who occupy eleven places. I know not Maheshwara." Devi appears with her husband and after some conversation he creates a terrific being (Vírabhadra) who destroyed the preparations for the sacrifice and induced Daksha to sing the praises of Siva, on which the god appears and promises not to allow the sacrifice to remain fruitless. In the third version, the sacrifice is pierced by an arrow shot by Rudra and such consequences ensue that all the gods joined in praising him: "and they apportioned to him a distinguished share in the sacrifice and,

[1] Rudra gave his bow to Devaráta, the ancestor of Janaka, Raja of Mithila, whilst Vishnu gave his to Richíka, from whom it came to Jamadagni, the father of Parasuráma.

through fear, resorted to him as their refuge. He then became pleased and rectified the sacrifice and whatever was removed, he restored to life as it had been before." The Váyu Puráṇa[1] makes the gods first obtain the permission of Mahádeva and then combines the story as given in the second and third versions from the Mahábhárata above noted. Dadhíchi remonstrates with the assembled gods on the absence of Rudra and Uma addresses her lord as she sees the gods go by, and he replies in the terms already assigned to him above. Devi then asks how it is a god like him should not have a share and what could she do that he might obtain a share of the sacrifice. Then Siva addressed his bride and told her that by her perplexity that day all the gods are bewildered, that his priests worship him in the sacrifice of true wisdom where no officiating priest is needed, but let her approach and see the being he was about to create. Having spoken thus he created Vírabhadra who destroyed the sacrifice.

Wilson notes that the Kúrma-Puráṇa also gives the discussion between Dadhíchi and Daksha and that their dialogue contains some curious matter. "Daksha, for instance, states that no portion of a sacrifice is ever allotted to Siva and no prayers are directed to be addressed to him or to his bride. Dadhíchi apparently evades the objection and claims a share for Rudra, consisting of the triad of gods, as one with the sun who is undoubtedly hymned by the ministering priests of the Vedas. Daksha replied that the twelve Adityas received special oblations ; that they are all suns and that he knows of no others." This Puráṇa makes Sati, the wife of Siva, to be the daughter of Daksha, and that she, chagrined at the treatment received from her father, committed suicide, on which Mahádeva cursed Daksha to be born again as a Kshatriya and in this second birth, the sacrifice took place. The Linga, Matsya, Pádma and Bhágavata Puráṇas all declare that Sati put an end to herself by *Yoga*, whilst the Káshi-khanda of the Skanda Puráṇa makes Sati throw herself into the fire prepared for the sacrifice. The Bhágavata gives the entire story in detail. It appears that Daksha attended a sacrifice celebrated by the Prajápatis and that on his entrance all the gods arose and saluted him except Brahma and Mahádeva. Daksha made obeisance to Brahma, but incensed at

[1] Wilson, VI., 120.

the conduct of his son-in-law abused him roundly in the presence of the gods. He gives the description of Siva's person which has been already noticed and declares how unwilling he was to allow his fawn-eyed daughter to marry "this impure and proud abolisher of rites and demolisher of barriers." Having thus reviled Siva, Daksha cursed him never to receive any portion along with the other gods. Then Nandíswara defended Mahádeo and devotes him who regards Daksha's words, "to practise the round of ceremonies with an understanding degraded by Vaidik prescriptions * * Let the enemies of Hara whose minds are disturbed by the strong spirituous odour and the excitement of the flowery words of the Veda, become deluded." In this speech we see that the advocates of Sivaism depreciate the Vedas, most probably, as remarked by Muir, from a consciousness that their worship was not very consistent with the most venerated religious records of their own country. Bhrigu, chief of the Brahmans, was one of the sages present and he replied to Nandíswara by a counter-imprecation:

"Let those who practise the rites of Bhava (Siva) and all their followers, be heretics and opponents of the true scriptures. Having lost their purity, deluded in understanding, wearing matted hair and ashes and bones, let them undergo the initiation of Siva, in which spirituous liquor is the deity. Since ye have reviled the Veda and Bráhmans, the barriers by which men are restrained, ye have embraced heresy. For this Veda is the auspicious, eternal path of the people, which the ancients have trod and wherein Janárdana (Vishnu) is the authority. Reviling this Veda, supreme, pure, the eternal path of the virtuous, follow the heresy in which your god is the king of goblins (Bhútesa)."

On hearing this imprecation, Siva departed and the sages worshipped Vishnu for a thousand years. The enmity between Daksha and his son-in-law continued, and when Daksha became chief of the Prajápatis and resolved to celebrate the great Vrihaspatisava sacrifice, Sati came to visit him and he, reviling Siva, so vexes her that she voluntarily dies. Siva, on hearing this, creates from a lock of his matted tresses, the demon who destroyed the sacrifice. The gods then have recourse to Siva, who is pacified and allows the sacrifice to proceed and to remove the pollution caused by the demon and his attendants an oblation is offered to Vishnu. Only then does Vishnu appear in order to receive the reverence of Brahma, Siva and the other gods and to explain that

he himself was the one supreme deity and the others being emanations from him were entitled as such to some respect."[1] "As a man does not think of his own members as belonging to another, so the man who is devoted to me (Vishnu) does not look upon created things as distinct from me. He who beholds no distinction between the three gods who are one in essence and the soul of all things, attains tranquillity."

Contest between Rudra and Náráyana.

In the preceding paragraphs we have an account of the havoc wrought at Daksha's sacrifice by the weapons of Siva, and in another story from the Mahábhárata we have the sequel related by Krishna as Dharmaja. At this time Arjuna and Krishna as Nara and Náráyana were engaged in performing great austerities on the Gandhamádana mountain above Badari and the blazing trident which destroyed Daksha's sacrifice at Kankhal where the Ganges debouches on to the plains followed the course of the river upwards seeking fresh enemies. Arrived at Badari, it entered the hermitage of the Rishis and smote Náráyana, full on the breast, but the Rishi repelled the weapon and with a great yell it bounded back into its wielder's hands. Rudra was astonished and forthwith hastened to Badari and attacked Náráyana, but the Rishi seized him by the throat and Nara raised up a straw which became a great axe and was hurled against Rudra when it broke into fragments (*khandana*) : hence the name Khandaparasu. The two then continued to fight, but when the gods saw the fearful consequences of the conflict, the utter cessation of all worship and destruction of all things, they deputed Brahma to endeavour to effect a reconciliation. He approached Rudra and explained to him that Nara and Náráyana were one form of the supreme being as he (Brahma) was another and Rudra a third, and so plied his arguments that the gods became reconciled. Rudra then propitiated Náráyana and Hari (Vishnu) addressing Mahádeva said :—'He who knows thee, knows me : he who loves thee, loves me. Henceforth let this *srívatsa* of mine be the mark of the trident and thou shalt be the *srikantha* marked upon my hand.' Having thus created a mark devised by each for the

[1] The Saivas in the Linga-Purána retort on the Vaishnavas and make Vishnu and Brahma quarrel, because the one called the other 'child', until at length a luminous Linga, encircled with a thousand wreaths of flowers, appeared and bewildered them both. For a thousand years the two gods tried to find the end of the Ling and not succeeding worshipped Mahádeva.

other, the gods joined in an indissoluble friendship. Krishna then goes on to tell the Pándavas that it is Rudra with spirally-braided hair that precedes them in the battle and slays their enemies and therefore advises them to devoutly reverence "him the god of gods, lord of Uma, of boundless power, Hara, the undecayable lord of all." This story probably contains an allusion to the fact that Hardwár and Badari were the scenes of some great contests between the followers of the two sects, which indeed are not unknown in the present age.

Contest between Krishna and Bána.

We have an account of another contest between Krishna and Siva in the story of the Daitya Bána, given in the Vishnu Purána.[1] Prahláda, the great Daitya, had a son Virochana, "whose son was Bali, who had a hundred sons, of whom Bána was the eldest." Bána had a lovely daughter, Usha by name, who seeing Párvati and Siva sporting together desired like dalliance and prayed the beautiful wife of the great god for assistance. She graciously addressed Usha and said:—"Do not grieve, you shall have a husband. He who shall appear to you in a dream on the twelfth of the light half of Vaisákha shall be your husband." Usha dreamed a dream and saw Aniruddha, son of Pradyumna, and with the aid of her confidante Chitralekha induced him to visit her. Before this took place, Bána had been engaged in propitiating Mahádeva and weary of rest had prayed the god to give some occupation to the thousand arms he possessed, and the god was pleased to grant the request. When Bána heard that Aniruddha was in the palace he captured the lover and bound him, and on this becoming known Krishna, Balaráma and Pradyumna set out for the Daitya city and a great contest took place between them and a mighty fever sent by Siva. Then Bána and the whole Daitya host aided by Siva and Kárttikeya fought with Krishna. A single combat also took place between Siva and Vishnu. The former was struck with the weapon of yawning and so set agape that he was unable to continue the contest. Bána then engaged Krishna and both were wounded; "desirous of victory, enraged, and seeking the death of his antagonist each hurled missiles at the other." When Krishna was about to destroy Bána with the discus Sudarshana, the mystical goddess Kotavi

[1] Wilson, X., 107.

stood before him naked and induced him only to lop off the arms of the Daitya. Then Siva came and praying Krishna to be merciful to Bána, said :—"I have given Bána assurance of safety. Do not thus falsify that which I have spoken. He has grown old in devotion to me. Let him not incur thy displeasure. The Daitya has received a boon from me and therefore I deprecate thy wrath." Krishna replied :—"Since you have given a boon to Bána let him live. You must perceive that you are not distinct from me : that which I am thou art." Aniruddha and his wife were released and accompanied Krishna back to Dwáraka. On this story Wilson remarks :—"There can be little doubt that this legend describes a serious struggle between the Saivas and Vaishnavas in which the latter, according to their own report, were victorious and the Saivas although they attempt to make out a sort of compromise between Rudra and Krishna are obliged to admit his having the worst of the conflict and his inability to protect his votary." In the text quoted above, Sonitapura is the name of Bána's city which elsewhere has the synonyms Ushávana, Kotivarsha, Bánapura and Devikota. The last is commonly identified with Devicottah in the Karnatic which is popularly believed to be the scene of Bána's defeat. But the name occurs also in other parts of India and in the Kálika-Purána, Bána is described as the neighbour of Naraka, Raja of Prágiyotisha or Asám. In Kumaon, the Lohughát valley is held to be the scene of Bána's defeat and Súi represents the site of Sonitapura 'the red city' of the Puránas. The soil itself is appealed to in order to confirm the truth of the legend, for on removing the crust a deep-blue or more generally a deep red ferruginous clay is turned up which is said to owe its colour to the blood of the Daityas. In the rainy season also, the Lohu or 'blood river' pours down a similarly discoloured stream to Lohughát. Kotavi the Vidhyamantramayi or 'goddess of the magical lore of the Daityas' is elsewhere called Lamba[1] and is said to be the mother of Bána and one with Kálí. Her name is preserved here in Kotalgarh, 'the fortress of the naked woman,' whilst Mahádeo is worshipped as 'the lord of Bána' at Báneswar-ke-áli in Katyúr. In Garhwál, Usha, or in the local dialect Ukha,[2] gives her name to Ukhimath, where

[1] Siva as Lambakeswar is worshipped at Jhaltola in Bel and Kotavi or Kotbi has a temple in Kharáyat. [2] The loves of Usha and Aniruddh have been dramatised by Chandra Sekhara in the *Madhuánirudddha*, Wilson, XII., 396.

a temple was built for her by her father Bána in Patti Bámsu, the name of which also is derived from Bána Asura. There is a temple to her husband Aniruddha at Lamgauri in the same patti.

The false and the true Vásudeva.

Another legend relates the conflict between Krishna and the Paundraka or false Vásudeva, so called because born in the country of the Paundras or western Bengal. The Vishnu Purána[1] describes him as "he who though not the Vásudeva was flattered by ignorant people, as the descended deity, until he fancied himself to be the Vásudeva who had come down upon earth. Losing all recollection of his real character he assumed the emblems of Vishnu" and sent an ambassador to Krishna, desiring him to lay aside the insignia, name and character of Vásudeva and come and do homage. Krishna replied that he would come and that quickly and so provide that there should never again be any question of the sort. Aided by the Raja of the Káshis, Paundraka met the forces of Krishna, but soon the real discus and mace demolished the false weapons and their wielder. The Raja of the Káshis however, "adhering to the imposture of his friend," continued the conflict until he was decapitated by Krishna, who slew him and threw his head into the city of Káshi. When the people saw that the Raja was dead, they propitiated Siva and asked him to avenge the murder of their king and Siva pleased to be adored in the sacred city granted their request. From out of the sacrificial flame uprose a terrible female form, enwreathed with fire, who attacked Dwáraka, but repulsed by the discus it fled again to Káshi still followed by the weapon of Krishna. The army of Káshi and the attendants of Siva resisted, but the discus consumed the city and all its inhabitants and returned to the hands of Vishnu. Wilson writes:—"In this legend also we have a contest between the followers of Vishnu and Siva intimated; as besides the assistance given by the latter to Paundraka, Benares has been, from all time, as it is at present, the high place of the Siva worship. There is also an indication of a Vaishnava schism, in the competition between Paundra and Krishna for the title of Vásudeva

[1] Wilson. X., 121. The Bhágavata Purána makes the Paundraka Vásudeva, chief of the Kárúshas, a Vindhiyan tribe and the Padma makes him chief of Káshi. According to the Hari-Vansa, Krishna is absent on a visit to Siva at Kailása when Dwáraka is attacked by Vásudeva aided by the Nishádha king Ekalavya, and Krishna only returns in time to repel the enemy.

and the insignia of his divinity." It will thus be seen that the Vaishnava incarnations invented to defeat the efforts of the rival sect were not received without opposition, and that the old contest between Aryan and Dasa was revived in the rivalry between the Aryan Vaishnavas and the Dasa Saivas, neither of whom show the slightest regard for Vaidik teaching.

Vásudeva.

In the Mahábhárata, Sanjaya, the able minister and charioteer of Dhritaráshtra, sings the praises of Krishna and attributes to him all god-like qualities and persuades Dhritaráshtra to recommend the worship of Krishna to Duryodhana. In one of his discourses, the name Vásudeva is explained as being derived "from his dwelling (*vasanát*) in all beings, from his issuing as a 'Vasu' from a divine womb." This seems to be the oldest and most popular of the names of Vishnu in Garhwál, where there are several temples to Básdeo and legends connected with a king of that name which are more applicable to a deified hero than to a mere mortal. In a passage, quoted by Muir,[1] where Krishna is describing to Yuddhishthira the different partisans of Jarásandha, there appears to be a tradition indicating some struggle at a period antecedent to that of the writer, between the worshippers of Vishnu and those of some local deity who was venerated in the provinces to the east of Magadha. Krishna says:—"And he who formerly was not slain by me has also taken the side of Jarásandha—(I mean) the wicked man who is known as Purushottama amongst the Chedis * * who through infatuation continually assumes my mark. He who is a powerful king among the Bangas, Pundras and Kirátas and is celebrated in the world as the Vásudeva of the Pundras." On this Lassen remarks:—'Since these became in later times two of the most venerated names of Vishnu, it is clear from this passage, that among the eastern tribes, and those too not of Aryan origin, a supreme god was worshipped, whose name was afterwards transferred to Vishnu." Elsewhere I have shown that the name Kirátas was most probably given to the oldest inhabitants of the Kumaon hills, and this would help to explain the local legend connected with Básdeo, as the founder of the dynasty who ruled in Upper Garhwál.

[1] IV., 297: see Wilson, X., 121, for an account of the Paundraka Vásudeva who set himself up against Krishna.

Reconciliation of Siva and Vishnu.

We have now traced, so far as the space at our disposal admits the history of the two great gods of the Hindu pantheon. We have seen that while Siva in many passages is represented as inferior to Vishnu, Krishna and Ráma, in other passages he is held to be one with the supreme spirit. We have now to indicate how it came about that, as in these hills, both are most frequently considered emanations of the one great power and equally deserving of worship. Whether due to love of peace or to priestly greed, we have seen that the compilers of the epic poems have in several instances made each of the gods to say that he who loves one loves the other, and in one of the accounts of the contest between Siva and Krishna, Brahma is made to relate a dream in which he saw the two gods, each invested with the emblems of the other, Hara (Siva) in the form of Hari (Vishnu), with the shell, discus and club, clothed in yellow vestments and mounted on Garura and Hari in the form of Hara, bearing the trident and axe, clad in a tiger's skin and mounted on a bull. The Rishi Márkandeya then explained the meaning of the vision thus:

"I perceive no difference between Siva who exists in the form of Vishnu and Vishnu who exists in the form of Siva. I shall declare to thee that form composed of Hari and Hara combined, which is without beginning, or middle, or end, imperishable, undecaying. He who is Vishnu is Rudra; he who is Rudra is Pitámaha: the substance is one, the gods are three, Rudra, Vishnu, Pitàmaha. Just as water thrown into water can be nothing else than water, so Vishnu entering into Rudra must possess the nature of Rudra. And just as fire entering into fire can be nothing else but fire, so Rudra entering into Vishnu must possess the nature of Vishnu. Let Rudra be understood to possess the nature of Agni; Vishnu is declared to possess the nature of Soma (the moon); and the world, moveable and immoveable, possesses the nature of Agni and Soma: the lords Vishnu and Maheshwara are the makers and destroyers of things moveable and immoveable, and the benefactors of the world."

The modern Siva a pre-Bráhmanical deity.

In the preceding pages we have endeavoured to show that the introduction of the worship of Siva was attended by much opposition and that the terrible form of the god was an object of disgust and contempt to the followers of the orthodox deities. Siva is in this form associated with the goblins, demons and spirits and all the beings that in the earlier works are represented as non-Aryan. He delights in human sacrifices, a custom specially regarded as belonging to the forest and hill tribes. He assumes the character of a forester

at times and his home is in the hills. In this form he is an emanation distinct from the Mahádeva of the older passages of the Mahábhárata and owes his origin to the pre-Bráhmanical and certainly non-Aryan religion of India. Stevenson[1] is of the same opinion which he bases on the following facts:—(*a*) Siva is not named in the Vedas: (*b*) Rudra even if identified with Sivá has not the same position in the Vedas which the later Mahádeva holds in the Puránas and épics: (*c*) the legend of Daksha's sacrifice shows that his right to a share in the sacrifice was disputed and that no officiating priest was necessary, which, as we have seen, was the great distinction between the Dasyus and the Aryans: (*d*) there is no connection between the linga or form under which he is now worshipped and any Bráhmanical emblem: (*e*) the principal seats of linga worship are to be found in southern India and along the Himálaya at a distance from the orthodox Bráhmanical settlements: (*f*) in the Marátha country the linga shrines are served by Gurava priests of the Sudra class, whilst on the other hand, Brahmans alone officiate in the Vaishnava temples. This last distinction, however, is modified in the Kumaon Himálaya where all temples are served either by religious fraternities or by Khasiya Brahmans who have really no title to the name. All these facts point to a non-Bráhmanical origin for the worship of Siva as it exists at the present day. From the celebrity of the Kumaon Himálaya from the earliest ages as the abode of ascetics and the seat not only of secular but of theological learning and its position as the supreme resort of the worshippers of Siva as Pasupati at the present day we may well assume for it a prominent part in the evolution of modern Sivaism. Professor Whitney writes:—"The introduction of an entirely new divinity from the mountains of the north has been supposed, who was grafted in upon the ancient religion by being identified with Rudra: or again a blending of some of Agni's attributes with those of Rudra to originate a new development. Perhaps neither of these may be necessary: Siva may be a local form of Rudra, arisen under the influences of peculiar climatic relations in the districts from which he made his way down into Hindustan proper; introduced among and readily accepted by a people which, as the Atharvan shows,

[1] J. R. A. S., V., 189, 264: VII., 1, 64, 105: VIII., 330.

was strongly tending towards terrorism in its religion." Gorresio in his preface to the Rámáyana expresses an opinion that Mahádeva was the special deity of the southern races who are identified by him with the Rákshasas of that poem, and though Muir, after a careful examination of the evidence, comes to the conclusion that "there are not sufficient grounds for regarding the non-Aryan tribes of southern India as being specially addicted to the worship of Siva, there are, however, strong grounds for believing that there was an intimate connection between the non-Aryan tribes of the Himálaya, the Dakhin and southern India and that all worshipped forms which enter into the conception of the many-sided Mahádeva. From the time of Sankara Achárya, Dakhini priests minister in the great shrines of Kedárnáth in Garhwál and Pasupati in Nepál, and he like many of his predecessors was of southern origin.

Sakti.

There can be little doubt that the Sakti or female forms are due to a popularising of the Sánkhya idea of 'Purusha' and 'Prakriti.' The early conception of the supreme Purusha or spirit as being without qualities (*gunas*) gave rise to a theory to account for the creation and the existence of the sexes which makes the exhibition of the creative power to be due to the union of the wish with the deity himself. Later on the followers of the Sánkhya system of philosophy make a distinction between nature and the supreme spirit. The former which they call 'Prakriti' or 'Múla-Prakriti' is held to be the eternal matter and plastic origin of all things, independent of the supreme spirit, but co-existent with him as his Sakti, his personified energy or bride. Thus from the union of power and will or spirit and matter all things were produced, and as each of these creatures of the creator possesses a portion of the supreme spirit, they have a double character, male and female. The *Prakriti Khanda* of the Bráhma Vaivartta Purána[1] devotes itself to an explanation of the forms of Prakriti which are also indentified with Máya, the goddess of illusion. In that work the meaning of the word Prakriti is thus explained:—"The prefix '*Pra*' means pre-eminent; '*kriti*' means 'creating'; that goddess who was pre-eminent in creating is called Prakriti. Again, '*Pra*' means best, or is equivalent to the term

[1] Wilson, I., 240: III., 100.

'*sattwa*,' 'the quality of purity'; '*kri*' implies 'middling,' the quality of 'passion' (*rajas*) and '*ti*' means worse or that of 'ignorance' (*tamas*). She who is invested with all power is identifiable with the three properties and is the principal in creation and is therefore termed Prakriti." By a natural process the personification of the energy of the supreme spirit was extended to the energies of the gods and the same record tells us how Prakriti was divided into five portions:—Durga, the Sakti of Mahádeva; Lakshmi, the Sakti of Vishnu; Sarasvati,[1] also the Sakti of Vishnu; Sávitri, the Sakti of Brahma and mother of the Vedas and Rádha, the mistress of Krishna. This category has since been modified and extended to include portions, parts and portions of parts of the primitive Prakriti. Thus Chandika and Káli are portions and Pushti is a part of Prakriti, whilst all womankind are included in the third category as containing portions of parts of the deity and are divided into good, middling and bad according as they derive their origin from each of the three equalities inherent in the primitive Prakriti. Though the principle of the worship of 'the personified energy' is inculcated in the Puránas, the ritual is contained in the Tantras for which the Sáktas or worshippers of Sakti claim the authority of a fifth Veda.

In the Sáma Veda (VIII., p. 240) occur the verses:—"He felt not delight being alone. He wished another and instantly became such. He caused his own self to fall in twain and thus became husband and wife. He approached her and thus were human beings produced." It is precisely in this form that Sivá appears in some very early sculptures under the title Arddhánáríswara; on the right side male and on the left side female. Bardesanes,[1] who wrote in the third century an account of India, records the following description of this form:—"In a very high mountain, situated pretty nearly in the middle of the earth there was as he heard a large natural cave in which was to be seen a statue ten or perhaps twelve cubits high, standing upright with its hands folded crosswise and the right half of its face, its right arm and foot, in a word its whole right side was that of a man: its left that of a

[1] In the fragments of his Indika preserved by Porphyry he states that he collected the materials from Dandaus or Gaudamines, chief of an embassy whom he met at Babylon in the reign of Antoninus of Emesa, 218-222 A.D. J. R. A. S., XIX., 274.

woman: and the indissoluble union of these two incongruous halves in one body struck all who saw the statue with wonder. On its right breast was engraved the sun, on its left the moon; on its two arms were artistically and sculptured a host of angels, mountains, a sea and a river together with the ocean and plants and living things and all that is, and the Indians told him that God after he had created the world gave this statue to his son as a visible exemplar of his creation, and I asked them," adds Bardesanes, "of what this statue was made and Sandanes assured me and the others confirmed his words that no man could tell: that it was not gold or silver, nor yet brass or stone nor indeed any other known material; but that, though not wood, it was the likest a very hard and sound wood." He then describes the 'pool of probation' which lay within the cave and in which the voluntary and involuntary offences of man were probed and tried. Statues of this form exist in the rock-cut caves at Elura, Badami and Elephanta and at Mahávallipur near Madras.

Form on coins.

This androgynous form is also found on the coins of Kadphises[1] accompanied with a necklace of skulls and the usual *Vahana* or attendant Nanda, the bull. In the same mintage Siva occurs in the guise of Kárttikeya, armed with a trident and adorned with the spiral shell-shaped hair from which he obtains the name Kapárdin. It would therefore appear that this montane Sivaism had its origin at least before the first century before Christ, and that in the time of Kadphises it was the popular cult of the Kábul and Peshawar valleys. The legends and figures on the coins of the Kanishka group have been analysed by Mr. Thomas,[2] who shows that at first this group, wherever their first Indian location may have been, clearly followed Iranian traditions in the classification and designations of their adopted gods, in the regions of their abundant mintages. Some of the coins of Ooerki or Huvishka exhibit Siva in various forms with the names of Indian deities in the legend. Thus with the very common legend *OKPO* which is probably the same as the Sanskrit *Ugra*, 'fierce' or 'terrible', a name of Siva, we have Siva-trimukhi three-headed and four-armed clad in a loin-cloth with a trident and a thunderbolt in his left hand and in his right hand a wheel, whilst the other points

[1] Wilson's Ariana Antiqua, pl. 10.

[2] J. R. A. S., IX. 211.

down to a goat or some similar small animal or is perhaps holding a water-bottle. With the legend '*Maasêno*' or Mahásena, a title of Kárttikeya, we have a figure of that deity and again with the legend '*Skando komaro bizago*' or Skanda, Kumára, Visákha, all of which are titles of Kárttikeya, we have two figures looking towards each other. In a coin with the legend '*Ardochro*,' perhaps representing '*Arddhugra*' or the androgynous form of Siva, the figure is clearly that of a female with something like a cornucopia in her hand. On the coins of the Devaputra Sháhinsháhi Vásudeva or '*Bazdeo*' we have with the *OKPO* legend, Siva-trimukhi with spirally-twisted hair, holding in the right hand the noose and in the left a trident and clad in a loin-cloth in Indian fashion. Again he appears as Pasupati, one-faced, riding on a bull, with bushy hair, holding the noose (*pásu*) and trident, clothed with the loin-cloth and naked above the waist. Siva-trimukhi also occurs riding on the bull and naked above the waist with the caste thread marked. These facts are sufficient to show that at least the germ of modern Sivaism was the dominant cult in the Kashmír valley in the first century after Christ, and that it was of the local Mahádeva type importing the family of Siva as well as himself into the pantheon in the shape of Kárttikeya, or Senapati, the typical northern offspring of Siva and also the favourite deity of the Katyúras, as Ganesha or Ganapati is the emanation in most favour in southern India. The noose-holding Siva or Pasupati attended by his vehicle the bull continued the type of the coins minted by the successors of the Turushkas.

We know that amongst the Buddhists the germs of the later Tántrik beliefs and the advanced Sákti doctrines are to be found in the developed Sútras of the *Mahá-Yána* school attributed to Nágárjuna and the council held by Kanishka. These remained in abeyance for several centuries, but none the less achieved their object when revived by the successors of their founder. The same source gave the idea of Mahádeva to the Brahmanists, and thus the two great branches of mediæval religion sought by union with pre-Bráhmanical beliefs[1]

Union through Sivaism.

[1] The exaltation of Khande Rao or Khandoba in the Dekhan to the position of an *avatár* of Siva is a notable instance of this union in comparatively recent times. A *máhátmya* has been written in his honour and is said to be a part of the Linga-Pránau. Vithoba is also a modern affiliation.

to widen and establish on a broader basis their respective cults. The masses through the popular deities were brought into some semblance of obedience to priestly authority and interest led the priests to retain the allegiance of the people by introducing order amongst the local gods, improving and extending their ritual and assimilating it to the highly complicated and ornate ceremonial of the Aryas. Once on the downward path along which all efforts to please the popular palate lead, the lower phases of Daemonism supplied both Buddhist and Brahmanist with the doctrines of advanced Sáktism, magical rites and formulæ and all the corrupted usages which mark the Tantras of both sects in their later developments. Learning was considered of no account and the verses of the Vedas becoming unintelligible to the celebrants served only as wonder-working spells by which the gods were compelled to attend to the wishes of their worshippers.

Linga.

From the same idea of the androgynous nature of the great gods arose the worship of the male and female organs under the symbols of the ling and yoni. This too borrowed largely from non-Bráhmanical sources both in north-western India and in southern India. The instructive story of the great fiery ling, still remembered in the name Jyotirdhám (Joshimath), would show that whilst the Brahmans and Buddhists were fighting for pre-eminence, the followers of the new cult of Siva stepped in and ousted both from the popular religion. In the advanced writings of the later Saivas, popular beliefs and practices are engrafted wholesale on the original quasi-Bráhmanical basis. In the Marátha country no Brahman officiates in a linga temple and for its service a distinct order of Sudra origin called Guravas has arisen who dress and bathe the image and arrange the offerings. The worshipper can only present the offerings and cannot lay them before the god as is done in Vaishnava temples. When Siva became two, his female half became Párvati, showing the montane origin of the idea, and with reference to his name Kedár, Stevenson remarks :—"If it may be asked what local deity Siva represents and what was his ancient name, I would state as a probable conjecture that Kedár was the original Hindu name of Siva. Though adopted into Sanskrit there is no real derivation of Kedár." The symbol of the linga, too, may have arisen from the pointed

peaks around his original home. Kedár is the name given to the highest peak on the Purandhar hills near Púna, on which there is also a temple of Siva. He is further represented in the Linga-Purána in the androgynous form Arddhánáríswara, thus clearly connecting the two ideas of the Sákti form and the linga emblems.

Linga-Purána.

The Linga-Purána has the following statement in the introduction:—"The ungenerated is Siva and the linga is denominated Saiva. When we speak of *pradhána* (chaos) and *prakriti* (nature) we are to understand the supreme linga which is free of smell, colour and taste; which can neither utter a sound nor be made the subject of touch; having no sensible qualities but stable, undecaying, ungenerated. The qualities of the manifested Siva, the most excellent linga are, on the other hand, smell, colour, taste, a capability of uttering sound and of being touched. He is the womb of the world, the principal element, sometimes vast, sometimes minute. The linga itself for the purpose of developing the world was produced from the ungenerated: and from social affection one linga expanded itself into seven into eight and into eleven. From these came the blessed triad, the first principle of the gods, springing from one subsisting in three; the whole guarded by one and the whole unity also carried forward and manifested by one, namely, by Siva * * * Rudra, the supreme spirit, the revered, the creator (Brahmá), the eternal, the all-wise, and he who is from his nature free from all fault is called Siva in the Puránas." There is nothing in this Purána of an obscene character, but the doctrines contained in it were soon pushed to their logical conclusions, and the Sánkhya idea of creation being the result of the union of the primeval male or soul of the universe called Purusha with the active female principle called Prakriti became the pregnant source of the licentious orgies sanctioned by the Tantras. The Tántrikas urge that the pursuance of evil is quite as effective towards liberation as restraining the passions and leading a godly life. The condition remains the same whether you are bound by an iron or a golden chain, and lust, drunkenness and gluttony may be indulged in if accompanied by spells properly pronounced according to prescribed formulæ and in proper places.

CHAPTER IX.

RELIGION—*(contd.)*

CONTENTS.

Buddhism. Sákya Muni. Caste. Lassen on Buddhism. Buddhist scriptures. Gods and genii. *Vinaya Pitaka. Abhidharma Pitaka.* The schools of Buddhism. The *Dhyáni* Buddhas. Magic. *Dhyánas*: *dháranis.* Spread of magical rites. Monotheism becomes polytheism. The Tantras. Further assimilation of Saiva practices. Buddhism in Nepál. Bonpas of Tibet. Sankara Achárya. His works and teaching. Siva. Pasupati in Nepál. Pasupati. Kedárnáth. Túngnáth and Rudrnáth. Other Saiva temples. Kamaleswar. Jageswar. Names of Mahádeo. Bágeswar. Vishnu. Badrináth. Pándukeswar. Briddh-badri. Dhyán-badri. Painkhanda. Jyotir-dhám. Other Vaishnava temples. Saktis of the Himálaya. Uma. Nanda. Ambika. Gauri. Durga. Mahisha-mardini. Tripura-sundari. Káli. Chámunda. Chandika. Sítala. Mátris. Vaishnava Saktis. Kárttikeya. Ganesha. Súrya. Hanumán. Garur. Dattátreya. Parásura. Mándháta. Kapila. Agastya Muni. Ghatotkacha. Gorakhnáth. Existing temples. Local deities. Satyanáth. Ráj-rajeswari. Ghantakarn. Bholánáth. Ganganáth. Masán. Goril. Kshetrpál. Airi. Kalbisht. Chaumu. Haru. Katyúris. Bádi. Nága worship. Mahásus. Conclusions. Sikhs and others.

Whether the coalition between the Vaishnavas and the Saivas noticed in the preceding chapter was due to philosophical tolerance or pressure from without we have not the means to decide, but we certainly know that whilst these changes were occurring within Bráhmanism itself, two very important factors in their development are to be found in the success of the Buddha schism and the influence of the demon-cults of the aborigines. The Bráhmanical system of theology and polity had attained a very high development, its system of castes and duties had been established when a power arose within its own pale which was destined almost to threaten its very existence. Buddhism was primarily a protest against caste privileges, ritualism and priestly tyranny; and was in some respects a development, for the use of the people, of the principles of the Sánkhya school of Kapila, the most ancient of the Hindu systems of philosophy. This school set up an original primordial matter called *prakriti*[1]

Buddhism.

[1] Also known as *Pradhána*, 'chief-one': *Máya*, 'source of illusion.'

as the basis of the universe out of which, by successive stages, creation is evolved. *Prakriti* itself is made up of the *gunas* or qualities, of goodness (*sattwa*), passion (*rajas*) and darkness (*tamas*) Each one's character depends on the proportion of each of these qualities in himself. It is the junction of *Prakriti* and *Purusha* or the soul that forms man, and it is this idea of the dual origin of creation that lies at the bottom of Sáktism. Weber[1] summarises the teaching of Buddha as inculcating—"that men's lots in this life are conditioned and regulated by the actions of a previous existence, that no evil deed remains without punishment and no good deed without reward. From this fate which dominates the individual within the circle of transmigration he can only escape by directing his will towards the one thought of liberation from this circle by remaining true to this aim and striving with steadfastness after meritorious action only; whereby, finally having cast aside all passions which are regarded as the strongest fetters in this prison-house of existence, he attains the desired goal of complete emancipation from re-birth. This teaching contains in itself nothing absolutely new: on the contrary it is identical with the corresponding Bráhmanical doctrine." The ascetic life was resorted to by all the orthodox who sought for that intimate knowledge of the deity which promised absorption in his essence as its reward, and Buddha himself first took refuge with Bráhman authorities to seek from them the way of salvation. The object of the Sánkhya system was to free the soul from the fetters which bind it in consequence of its union with matter. The Yoga branch of the same system makes its object the union of the individual spirit with the all-pervading soul by restraint and contemplation. Buddha, in the earlier part of his career, differed little from other ascetics of the Yoga school of Patanjali. He accepted the ancient doctrine of the transmigration of souls, the existing Bráhmanical divinities and the prevailing distribution into castes, but he substituted annihilation as the object to be aimed at instead of absorption into the essence of the deity. For him there was no God, and the only escape from the misery of existence was the entrance into the state of eternal sleep called *nirvána*. The authority on which he based his teaching was entirely personal. He was noted for his charity,

[1] Hist. Ind. Lit, p. 289.

patience and chastity, and he further claimed for himself the possession of superhuman power and knowledge and the state of being a Buddha, *i. e.* 'enlightened.' By his power he worked miracles and thus seemed to place the sign of superhuman approval on his mission: by his knowledge he scanned the past and declared what was to happen in future, that he was only one in the chain of 'enlighteners' and should come again on earth in the later times to give deliverance to a suffering world. In this character, he undertakes duties similar to those which have been attributed to Vishnu by his followers.

Sâkya Muni.

Buddha was not satisfied with the teaching of his instructors, and it was only after much thought, great restraint, study and self-repression that he attained the victory of 'the great renunciation' under the bodhi-tree. But once he grasped what he believed to be the truth he set to work to communicate the glad tidings to the people in their own vernaculars. This was, perhaps, the first time in the history of India that a great teacher condescended to address himself to people of all classes on matters concerning their spiritual welfare in a language which they could understand. The Bráhmanical system confined the interpretation of the sacred writings to a professional class who gradually grew up into a caste and guarded their privilege with jealous care. Amongst them, even, the truths taught by the philosophers who resided in caves and forests were delivered as secrets to a few in a language that had become difficult of attainment. Buddha changed all this and admitted as his followers all who received the first and only obligatory condition binding on all who chose to follow him:—'Believe on me and ye shall obtain rest.' And in this bringing home to the people in their own tongue the facts that they, whatever their positions might be, could escape the intolerable burden of metempsychosis by simply believing in the superhuman character of Buddha's mission, we have the key to the ready reception of his teaching by the people and the bitter prosecution to which both Buddha and his followers were subjected at the hands of the Bráhmanists. Burnouf enumerates the ignorance, poverty and misfortunes of the people and the greatness of the rewards held out by Buddha as the immediate predisposing causes of the rapid spread of his doctrines. He quotes the story of the pupil

Panthaka who was so stupid that when his teacher pronounced[1] '*bhuh*' he forgot '*om*' and when '*om*' was pronounced he forgot '*bhuh*': yet Panthaka was soon a candidate for the religious life. Those devoted to religion became the '*Sangha*' or 'assembly' and thus arose the Buddhist triad of belief:—'*Buddha, Dharma, Sangha.*' There was no priestly class, but it was held for all that progress could best be made by following the ascetic life, because in it there was least temptation to earthly excitement and more aid towards contemplation. Undoubtedly the *Sangha* gave the greatest offence to Bráhmanists, for it became an easy refuge for those who were alarmed at the difficulties of Bráhmanical learning. According to the legends, the preaching of Sákya Buddha was accompanied by miracles, and the Bráhmans who sought to vie with him were as signally defeated as the Egyptian priests were by Moses. In a story, quoted by Burnouf, the Bráhmans complain that formerly they were honoured and supported by all classes, but since Sákya appeared all their honours and profits were gone. An additional reason for the hostility of the priesthood is here disclosed, and to this may be added the effect of the teaching that the sacred books were not the highest sources of knowledge and that sacrifices were of no avail to save a man from the consequences of evil deeds wrought in a former birth. Thus we find that the supreme authority of the sacred texts was set at naught by the great reformer, and with them the position of the priests as the authorised expounders of the sacred rules and alone entitled to offer expiatory oblations for the sins of the people.

Caste.

The great object of existence was to avoid existence. Though a good man might attain to the enjoyment of a better state by the practice of good works, yet this was not to be the aim and end of his efforts but to attain to final extinction. All other matters were of little import. Castes existed and would exist, but these and other mundane causes of joy and sorrow were all due to the influence of deeds done in former births. The mere fact that a person came to hear the preacher was due to some former virtuous act, and when the most unfortunate or degraded amongst his hearers received the truth into their hearts that their present condition was due to sins

[1] From the great '*Vyáhriti*' spell—'*Om, bhuh, bhuvah, svah.*'

committed in their former births and that a way of release was opened to them, a way that was made easy for them and of which the duties were light, a response was at once elicited and the preacher's invitation was accepted. Sákya delighted to address his converts individually and explain the deeds of former births which brought the reward of being born when he appeared and of being able to hear him and accept his doctrine. On the other hand he not only described the sins which caused the man of low estate to be born in his present degraded condition, but also assured him of the finality of his suffering should he steadfastly adhere to the course now prescribed for him. Bournouf writes[1]:—"Sákya opened to all castes without distinction the way of salvation from which their birth had formerly excluded the greater part; and he made them equal among themselves and in his own esteem by investing them with the rank of monks. In this last respect he went much farther than the philosophers Kapila and Patanjali who had begun a work nearly resembling that which the Buddhists accomplished afterwards. By attacking as useless the works prescribed by the Vedas and by substituting for them the practice of personal piety, Kapila had placed within the reach of all, at least in principle, the title of ascetic which up to that time had been the complement and nearly exclusive privilege of the life of a Bráhman. Sákya did more: he gave to isolated philosophers the organisation of a religious body. We find in this the explanation of two facts; first, the facility with which Buddhism must have been propagated at its commencement, and secondly, the opposition which Bráhmanism naturally made to its progress. The Bráhmans had no objection to make so long as Sákya confined himself to work out as a philosopher the future deliverance of mankind to assure them of the deliverance which I have already styled *absolute*. But they could not admit the possibility of that *actual* deliverance, that *relative* liberation which tended to nothing short of the destruction, in a given time, of the subordination of castes as regarded religion. This is how Sákya attacked the foundation of the Indian system, and it shows us why a time could not fail to come when the Bráhmans placed at the head of that system would feel the necessity of prescribing a doctrine the consequences of which could not escape them."

[1] J. M. in Ben. Mag., p. 38.

Lassen on Buddhism.

Lassen also gives us a similar account of the position in which Sákya stood to the Bráhmans and their system :—

"When the founder of Buddhism entered on his career, the priestly constitution of the Bráhmans had existed for a great length of time, and appeared to be established on a foundation which could not be shaken, the priestly estate was revered by the other castes as the possessor of divine revelation and the knowledge thence derived of true religion and right morality, and further as the sole depository of the sciences. The whole conduct of life was directed by regulations; and the particular position of all the members of the state, and the rights and duties thence arising, were defined. Even persons of the lowest and most despised castes had a deeply-rooted belief that their lot was a necessary result of their birth. Amid a people, in whom the sense of freedom was thus entirely repressed, and to whom the idea of any amelioration in their condition was quite strange, Buddha entered the lists against the omnipotence of the Bráhmans. Instead of regarding, as they did, the highest truths as an exclusive privilege, which could only be acquired through a correct understanding of the sacred scriptures and the doctrines and morals founded thereon, and set forth in forms intelligible only to the initiated, he propounded to all men without distinction of birth, and in simple language, the tenets which he regarded as the highest verities. They were of such a kind as did not require to be accredited by any revelation, because they were either acknowledged by all, or of themselves were obvious to the meanest understanding." * * * *

"Still more decidedly did the new doctrine conflict with the high consideration and influence enjoyed by the Bráhmans. It detracted from the first, inasmuch as its founder claimed to be in possession of the highest knowledge. By putting forward this claim, he in fact denied, without expressly calling in question, the authority of the Vedas, as the highest source of knowledge, and hereby took away from the Bráhmanical system its proper foundation. The chief influence of the Bráhmans over the other castes must of necessity cease with the abolition of the sacrifices to the gods, which they alone had the right of administering. To such a result did the system of the Buddhists tend, wh› (not to speak of animal sacrifices) did not even practice the Bráhmanical rite of oblation by fire."

Buddhist scriptures.

As in the Bráhmanical systems, the principles and doctrines of the Vaidik period have undergone radical and important changes and have developed into ideas and practices little in consonance with the primitive belief, so in the Buddhist systems of the present day we look in vain or e simple teachings of Sákya and find little beyond the germs of the present practice in the earlier writings. The Buddhist scriptures are contained in two redactions—(*a*) the southern or Ceylonese followed by the people of Ceylon, Burma and Siam and written in Páli or Mágadhi, and (*b*) the northern written in Sanskrit

and translated into Tibetan, Chinese, Mongolian and Kalmak. Both agree in the distribution into three divisions (*Tripitaka*) :—(1) *Sútra-pitaka*, which relates the sayings of Sákya : (2) *Vinaya-pitaka*, concerning discipline and worship ; and (3) *Abhidharma-pitaka*, containing metaphysical and philosophical discussions. The Sútras are again divided into the simple and *Mahávaipulya* Sútras. The former are the more ancient in form, language and matter and are written in Sanskrit, chiefly in prose. The second class or more developed Sútras are written partly in verse and partly in prose, and the verse is chiefly a repetition of what has been said in prose and is written 'in a most barbaric Sanskrit or confounded with forms of all ages, Sanskrit, Páli and Prákrit.' In the matter, the simple Sútras represent Buddha surrounded by mortals and the assembly is only sometimes increased by the gods, whilst the later *Sútras* show the assembly as consisting of multitudes of men and women, gods and Bodhisattwas. No evidence of the worship of beings peculiar to the northern school of Buddhism is found in the older Sútras, nor is there 'the least trace of that vast mythological machinery where the imagination luxuriates through infinite space in the midst of gigantic forms and numbers. Here only are Buddhas who are considered human beings and of whom Sákya is the last.' These *Sútras* are, therefore, the earliest record of the sayings and teaching of the founder of Buddhism, and in their present form must be regarded as decisive of the character of the teaching at the time at which they were composed.

Gods and *Genii*.

An important[1] addition to our knowledge of this period is gained by an examination of the names of the deities given in the *Sútras*. These are Náráyana, Siva, Varuna, Kuvera, Pitámaha, Sakra or Vásava, Hari or Janárdana, Sankara and Visvakarman. These all exist as objects of worship to the present day and represent the deities of the Bráhmanical epic period. In the Bráhmanas, which belong, as a class, to the later Vaidik period, we have seen that the name Kuvera is only mentioned once, Siva and Sankara occur only as epithets of Rudra, Náráyana is seldom named, whilst Pitámaha, Sakra or Vásava and Hari or Janárdana are unknown.[2] Amongst

[1] Roer's Review, J. A. S. Ben., 1845, and Ben. Mag., VII., 19. These names occur, as will be seen, in the modern Hindu ritual current in Kumaon.
[2] Weber, *l. c.*, 303.

the Genii, the *Sútras* give the names of the Nágas, Yakshas, Garuras, Kinnaras, Mahoragas, and Dánavas, who are not mentioned in the Bráhmanas as well as of the Devas, Asuras, Gandhárvas and Pisáchas. Indra as Sakra or Sachípati, the husband of Sachi, frequently occurs and also under the name Kausika and in connection with Upendra.[1] All these divinities appear to have been those of the people amongst whom Sákya lived and to have been the object of constant worship in his time. Still the Buddhists, though acknowledging and accepting their existence, assign to these gods a place and power inferior to a Buddha. The simpler *Sútras* show us society as it was when Sákya preached. The existing caste-system was fully developed. Brahmans were distinguished for their learning and conduct, and whilst some lived as anchorites, others served as the spiritual guides to kings or as bards and panegyrists. The ruling families were of the Kshatriya caste and possessed great power, and, taken as a whole, the state of society was very much the same as at the present day. It may fairly be assumed that the germs of all the existing forms of belief were in existence and that Bráhmanism and Buddhism had much in common at starting, but gradually diverged the one from the other, so that the later manifestations of Buddhism differ in detail from the later Bráhmanical system of theology and philosophy as much as both of them vary from their common source, the teaching of Kapila Muni.

Vinaya-pitaka.

The *Vinaya-pitaka* concerning discipline comprises the second division of the Buddhist scriptures. It is made up of a series of legends in the form of parables and known as *Avadánas* which like the *Sútras* may be separated into classes. Those which mention Sákya and his immediate disciples only belong to the first class, and in the second class are included those which contain the names of persons who, like Asoka, lived long afterwards. In the third class may be placed those which are written in verse and are apparently modern amplifications of more or less ancient works. To become a Buddhist it was sufficient to express a belief in the divine character of Sákya and to resolve to become his follower. The novice was received

[1] The formula by which the Buddhist legends express that a saint has attained the degree of *Arhat* runs :—"He has become one of those who are entitled to be respected, honoured, and saluted by the *Devas*, along with Indra and Upendra."

and prepared by an assembly of the venerable, then his head was shaved, and he was clothed in yellow garments and took on himself the vows of chastity, poverty and obedience. As the followers of Śákya increased discipline became necessary and a certain rank based on age or merit was recognized. The main body of the assembly was made up of the Bhikshus, also called Sramanas, and Bhikshunis, the monks and nuns who had taken vows of celibacy and devoted themselves entirely to the religious life. The laity called Upásakas and Upásikás sat a degree lower down, but within these two great divisions were several distinct grades. The clergy were such by vocation, not by birth; the elders were called *Sthavira* (*thera* in Páli) and were again divided into elders and elders of elders. Those who comprehended the four great fundamental truths were styled *arya* or honourable.[1] Others again *arhat* or venerable, *Srota-apanna*, *Sakrid-agámin*, *Sakrid-anágámin*, *&c.* The *Aryas* in relation to Śákya himself were *Sravakas* or hearers or *Mahásravakas* (great hearers). Since rewards were attached to good and evil acts and sacrifice whether by mental or moral suffering was of no avail, the only resource for removing the effects of bad actions was confession of sins followed by repentance which forms one of the fundamental institutions of Buddhism. The religious ceremonies were simple, consisting in offerings of prayer and praise accompanied by music and gifts of flowers and perfumes. The Buddhist ritual has none of the bloody sacrifices which delight the followers of Pasupati and his consort Káli and addresses itself solely to the figure of Śákya and his relics. To him belong the thirty-two characteristics of beauty and the eighty secondary signs, and he is represented as an ordinary mortal seated in the attitude of meditation or making the sign of preaching. The relics or *sarira* (body) are portions of the mortal frame of Śákya which, collected at his death, have been deposited beneath the Chaityas erected to preserve them. Afterwards this honour was paid to the relics of his disciples and of those who deserved well of Buddhism. With Weber we may say that it is worthy of investigation how far this relic-

[1] These truths were—(1) there exists pain; (2) all that is born into this world suffers pain; (3) it is necessary to liberate ourselves from it; and (4) knowledge alone offers the means of this deliverance. The title of Arya was given to the companions of Śákya. It required supernatural faculties and virtues which implied freedom from the common conditions of human existence. (Bournouf).

worship, the building of steeples—traceable perhaps to the topes (*stúpas*) which owe their origin to relic worship—the worship of images of saints, confession, the use of bells and rosaries, the tonsure and the system of monachism has been adopted by Christianity. The question of the borrowing by Christians from Buddhists "is by no means to be summarily negatived, particularly as it is known that Buddhist missionaries penetrated at an early date, possibly even in the two centuries preceding our era, into western countries as far as Asia Minor."

The *Abhidharma-pitaka.*

The third division of the Buddhist scriptures called the *Abhidharma-pitaka* contains the metaphysical discussions of the followers of Sákya, These are specially said to have been compiled subsequent to his death and consist principally of amplifications of and commentaries on the doctrines laid down in the *Sútras.* They have not yet been sufficiently examined to admit of any accurate estimation of their contents, or the influence they may have had not only on the Bráhmanical schools of philosophy in India but also on the Gnostic schools of Egypt and Greece. According to Bournouf, the doctrines of the *Abhidharma* are in reality only a further development or continuation of the views here and there propounded in the *Sútras;* indeed, the writings in question often merely add single words to the thoughts expressed in the *Sútras:* "but in any case there exists an interval of several centuries between the two and that difference which distinguishes a doctrine still in its earliest beginnings from a philosophy which has arrived at its furthest development." Bournouf also notices the peculiar class of writings called Tantras, "which are looked upon as especially sacred and which stand precisely upon a level with the Bráhmanical works of the same name. Their contents are made up of invocations of various Buddhas and Bodhisattwas as also of their Saktis or female energies with a motley admixture of Saiva deities: to which are added longer or shorter prayers addressed to these beings and directions how to draw the mystic diagrams and magic circles that secure their favour and protection."

The above brief sketch will suffice to show what an important influence Buddhism must have had not only on the people of India and the surrounding countries but even on the schools of Egypt

and Greece.[1] It seized on a popular want and endeavoured to open up a new path by which the people might be released from the spiritual tyranny of their priestly guides. But in accepting the existing hierarchy of Bráhmanical divinities it took with it the seeds of that extravagant development of its mythology which even surpasses the monstrous fancies of the later Bráhmanical writings. Lassen in alluding to this creation of Buddhism writes[2]:—"The second is the mythology and cosmography peculiar to this religion with its numerous orders of celestial beings and their numerous heavens, to which we must add a peculiar mythical history with its numberless kings and endless periods. But in this instance the desire of excelling their predecessors has misled the Buddhists to transgress the usual bounds of the measureless and to give free scope to an imagination which runs riot amid mishapen conceptions." * * * "In spite of the peculiar advantages which it possessed, Buddhism, although it commenced with the youthful vigour of a new doctrine its conflict against Bráhmanism,—whilst the latter had already at that period given birth to its greatest creations and attained the stage of development at which the mind instead of striking into new paths continues to follow its ancient one and, in place of creative activity, devotes itself to the careful employment of the treasures it has inherited from its predecessors,—succumbed, nevertheless, at length, in India, to its rival, though at a late period and after an obstinate resistance." In Nepál we have the outcome of the later development of both the Buddhist and Bráhmanical systems still existing side by side and an examination of the forms of belief which there obtain will aid us in estimating the influence which Buddhism once exerted over the people of Kumaon, but we first continue our summary of the history of Buddhism.

The schools of Buddhism.

It was necessary perhaps that differences should arise and as early as Asoká's council the party led by Upagupta so offended the older members of the sect that the Sthaviras (or those who remained firm) retired to the Himálaya. Notwithstanding the efforts of Asoka and the convocation of the great assemblies for the purpose of defining and

[1] I do not refer to such wild theories as those given by Pococke in his 'India in Greece', but such as have been advanced by Bunsen, Müller, Lassen, Weber, and Mosheim. [2] Ben. Mag., *l. c.*, 41.

settling articles of faith and practice, dissensions spread and numerous schools arose. These were classed under two great divisions (*a*) the followers of the *Hína-Yána* or 'lesser vehicle'; and (*b*) those who adopted the *Mahá-Yána* or 'great vehicle.' The principles of the 'great vehicle' are supposed to have been formulated by Nágárjuna at the time of the great council held by Kanishka, rája of Kashmír. The story goes that Nágárjuna received from Buddha himself at the court of the Nága king instructions for the works that appear under his name, but the Chinese commentators note that truly these were composed by Nágárjuna himself, but in order that they might obtain acceptance, he permitted the statement to be made public that they had been taken down from the lips of Buddha. There is reasonable ground for believing that the works of which the authorship is attributed to Nágárjuna are the product of different hands at different times, and that so far as the aphorisms of the Mahá-Yána are concerned the name 'Nágárjuna' must like that of 'Vyása' be held to be a generic term for the compilers of the school, though, on the other hand, there is little doubt that a Nágárjuna did exist in the time of Kanishka. The great work of the school is the *Prájna-páramita, i.e.*, 'the wisdom that has crossed over,' also known as the *Raksha Bhágavati*, divided into five parts. The lesser *Yána* by degrees approached the development of the great *Yána*, but this had then already advanced on the road to magic and mysticism. The lesser *Yána* proceeded synthetically to its *kosmos*, whilst the great *Yána* took the opposite course and arrived at more incongruous results. The lesser recognized the *Pratyeka* or personal Buddhas, who were able to attain to Buddhahood, but could not communicate the truth to others, as well as the Bodhisattwas or Buddhas elect who are held to be the future Buddha in some former birth. The great *Yána* went farther and produced an entirely different set of Bodhisattwas and applying to them its advanced ideas on love, charity and mercy attributed to them new properties and functions. These Bodhisattwas might have become Buddhas had not intense pity for the sufferings of the world induced them to abandon their right to enter *nirvána*. Such were Avalokiteswara ('the lord who looks down from on high'), the personification of power and with it, the preserver of the faithful and Manjusri ('the fortunate'), the personification of wisdom and the

great patron of the Mahá-Yána.[1] These were the earliest and better known of the new forms of Bodhisattwas whose worship transformed the agnostic atheism of the earlier Sutras into a polytheism.

The Dhyáni Buddhas.

Further refinement separated the power of the Bodhisattwa Avalokiteswara from his protecting function and established a separate being under the name Vajrapáni, 'the wielder of the thunder-bolt,' and thus the mystic triad of the Mahá-Yána was evolved. The stages towards *nirvána* were pronounced to be five in number called *dhyánas* or mystic meditation by which the different worlds of Brahma were reached and in the last stage *nirvána*. To each of these stages a special Buddha is assigned called a Dhyáni Buddha belonging to the mystic world and free from material influences and with him is a Bodhisattwa and a *Mánushi* or human Buddha. Thus we have five groups of three each as follows :—

Dhyáni Buddhas.	*Bodhisattwas.*	*Mánushi Buddhas.*
1. Vairochana.	1. Samanta-bhadra.	1. Krakuchanda.
2. Akshobya.	2. Vajrapáni.	2. Kanakamuni.
3. Ratnasambhava.	3. Ratnapáni.	3. Kásyapa.
4. *Amitábha.*	4. *Padma-páni* (*Avalokiteswara*).	4. *Gautama.*
5. Amoghasiddha.	5. Visvapáni.	5. Maitreya.

The fourth triad represents the emanation of the present, Gautama ; and the fifth the emanation of the future, Maitreya. These ideas are unknown to the *Tripitaka* and even to the Chinese travellers Fah Hian and Hwen Thsang, and consequently must have had an origin later than the seventh century. Between the date of Kanishka's council and the evolution of the theory of the Dhyáni Buddhas, the Mahá-Yána had divided into two principal schools, the Mádhyamika which professed to follow Nágárjuna and his disciple Aryadeva[2] as its principal teacher, and the Yogáchárya which adopted the teachings of Aryasanga and his disciple Vasubandhu who flourished in the sixth century. Both are based on the mystical sections of the Mahá-Yána Sútras which themselves are

[1] Others are Guhyapati and the females Sarasvati, Tára and Dákini.
[2] The biographies of Nágárjuna and Aryadeva (Ceylon) were translated into Chinese, 384-417 A. D., and that of Vasubandhu, a contemporary of Aryasanga in 557-588 A. D. Both the former were natives of south India and the last was born in Patna.

developments of the Mahávaipulya or developed Sútras of the earlier records. Although the Mádhyamika school may have had the prior origin, its teaching seem to have fallen into abeyance until the rise of Aryasanga's school, when Buddhapalita revived them by writing his commentary on the works of Nágárjuna and Aryadeva which is still the chief authority of the existing Prasanga school in Tibet. The Mádhyamika follows somewhat the Sankhya school of Kapila in its development and the Yogáchárya, the Yoga school of Patanjali.

Magic.

In the earliest days of Buddhism, the Indo-Skythian territory was celebrated for the practice of magical rites, and it is no less known as the country of the Vidyadháras or 'holders of magical knowledge' in the Bráhmanical writings. Ghazni, Somnáth, Attak and the mountains of Kashmír were especially celebrated for their great schools of magic, and we read of embassies from China seeking the philosopher's stone and curious magical formulæ to insure health and long life, in the Peshawar valley and along the slopes of the Hindu Kush. Aryasanga, brother of Vasubandhu Vaibháshika, was a monk of Peshawar and wrote the *Yogáchárya Bhúmi Sástra*, the first great work of the Yogáchárya school. The monastery in which he lived was visited by Hwen Thsang, but was then in ruins. Aryasanga was the first who authoritatively allowed the dæmon-cults of the aborigines and the Sivaite practices of the commonalty, a place in the Buddhist system. He brought these deities and their energies in as protectors and allowed them niches in the Buddhist temples as worshippers and supporters of Buddhá and with him began that close and intimate connection between Sivaism and Buddhism which ended in the absorption of the latter in India, at least. Hence in Nepál at the present day we have the most complicated conceptions of the Buddhist mythology, the most learned teaching of their schools mingled with names taken from the cult of Siva. The author of the *Trikanda-sesha* who flourished in the tenth or eleventh century mentions many of these novel forms, so that at that time the Buddhism of the plains must have acknowledged them and about the same time they penetrated into Nepál.

Dhyána, dhárani.

The great object of the Yoga was to attain to a mental state by which gradually *nirvána* or something equivalent to it might be acquired. This might be accomplished by the five stages of *Dhyána* or intense contemplation arriving at a complete freedom from joy or sorrow or by the self-induced trance called *samádhi* (absorption in contemplation) which made one oblivious of all external things. Gradually, as aids to these exercises, were invented the *Dháranis* or mystical signs and formulæ which with the *Mudras* or mystical gesticulations and the *Mandalas* or magical circles find their full development in the Saiva and Buddhist Tantras. In the *Dháranis* every being and even every idea is expressed by algebraical formulæ and whoever possesses the proper clue to their arrangement is able to command the being or the idea represented by them. Some include the ideas of the *Páramita* (passed over) or perfection,—here opposed to *Sansára* or suffering—and others compel the deities or spirits to appear and the object is attained by repetition of the formulæ for a local and special purpose. This process is based in the supposed connection between the name and the object it represents. As nothing exists in reality, the name is not only the object but the essence of the object and by using it as a spell you compel the object to appear. This ritual was further simplified by making the *Mudras* or certain conventional signs made by the fingers representatives of the *Dháranis*. There may have been some connection at first between the formulæ of the *Dháranis* and the figures assumed by the fingers in the *Mudras*, but this connection, if it ever existed, is now lost. As man is made up of soul, body and speech or mind and these personified represent the deity, so whilst the soul is engaged in contemplation, the body aids by signs or *Mudras* and the mind through speech repeats the conjurations; the united effect of which is that the devotee gradually assumes himself to be one with the deity and does become so as the shadow in a mirror is one with that which causes it. By this process *siddhi*, or the state in which magical powers are acquired, is attained, and from these arose the *Mandalas* or magical circles by which the deities are compelled to appear and minister to the secular and religious wants of the celebrant.

As remarked by Vassilief, these observances are not found in the Sútras of the lesser or great *Yána*, nor to the same extent in

Chinese Buddhism which apparently received its books before these ideas were developed in India. They flourish, however, in Tibetan and Nepálese Buddhism and there assume for themselves an authority as the legitimate outcome of Nágárjuna's teaching which, in fact, they are neither entitled to nor possess. Like the Saivas, the Buddhists took over the whole body of the village deities good and malignant. To this influence were attributed epidemics, floods, droughts and personal misfortunes and hence the priests were applied to for aid. Some of the dæmon races were converted like the Yakshas (Khasas) and Nágas and people of the Sindhu country who used to offer human sacrifices to the Rákshasa Khingalatchi; for others spells were contrived to compel their obedience and a literature (based on the great, mystical Mahásamaya Sútra) grew up which explained these spells. The *Dháranis* at first had no ritual and were easily understood by the commonalty, but gradually the priests invented a complicated ceremony suitable to each particular wish and each class of worshippers and thus contrived to retain the spiritual direction of the people in their own hands. The ceremony opened with a dedication of its results to a desired object, then came the placing of the various deities and the worship with incense, water, grain and the waving of lights accompanied with spells and conjurations repeatedly altered at stated stages in the ceremony. The growth of the *Dhárani* ritual is thus described by Burnouf[1]:—

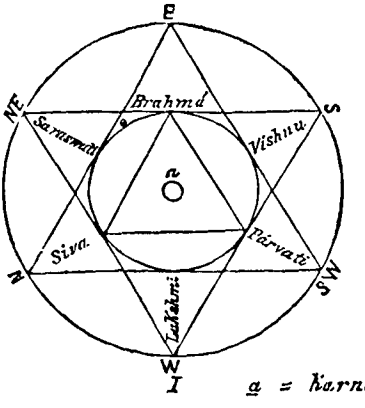
Spread of magical rites.

"Nous ne trouvons dans les commencements aucune instruction sur la lecture des *Dhâranis*. Mais ensuite, la necessité s'en est tant étendue graduellement qu'enfin il s'est formé un système entier pour que les conjurations obtinrent du succès. Ce que est à la tête de ce système, ce sont les formules préparées qui sont précédées des demandes religieuses, comme la croyance dans les trois objets précieux, brûler les aromates, &c. Il faut donner dans son cœur une place aux Buddha et ensuite aux Bodhisattwa; enfin, apparaissent les autels autour des *Dhâranis*, et plus loin y est réunie la doctrine du Mahâyâna. Buddha dit au Manjusri:—Comme tous les sujets sont contenus dans les lettres c' est sur cela qu'a été fondée la signification du *Dhârani*."

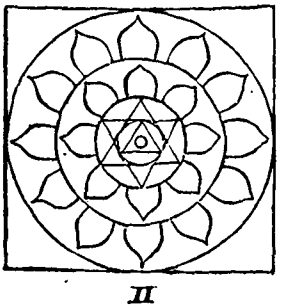
The *Dháranis* were used for all purposes and were powerful to save from danger those who were fortunate enough to possess and use them. It is not possible to give the details of their growth and describe them here, but we may note that to the present day some use

[1] Burnouf has translated part of the Suddharmapundaríka Sútra, or 'lotus of the good law,' in his 'Le Lotus de la bonne loi.' Paris, 1852.

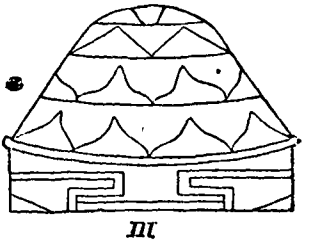
a moveable *Dhárani* on a miniature altar made of crystal and intended to represent the flower of a lotus with the leaves turned back. Fig. III. shows the side elevation and fig. II. the altar as viewed from above. It will be seen that there are two rows of petals, one of eight and the other of sixteen. The top itself contains a six-pointed star (fig. I.) formed by the intersection of two equilateral triangles and in the example given, having each point dedicated to one of the so-called triad or his Sákti. At the summit there is a circle and within it a triangle in the centre of which is the spot called the *Karnika* or seed-vessel of the lotus. The base of the cone is known as '*bhupur*' or 'earth-city'. The name of the deity to be worshipped or a small image of him stamped on metal is placed on the *Karnika* and the ceremony then proceeds in the ordinary way. These crystal altars are called generically *Sri-Jantra* and admit of great variety in form[1] and detail.



I a = Karnika



II



III

[1] The figures are after Ravenshaw in J. R. A. S., XIII., 71. The freemason will recognize in fig. I. a design with which he is well acquainted.

Monotheism becomes Polytheism.

There can be little doubt that one stage in the development of the *Dháranis* was reached when northern Buddhism produced the monotheistic idea of a primordial Buddha, called Adi-Buddha or Bhagwán or Bhagavat from whom the Dhyáni Buddhas were evolved. Each of these gave origin to a Bodhisattwa who created out of himself a material world and from whom emanated a Mánushi Buddha. Thus Amitábha has been evolved from Bhagwán and from him by wisdom and contemplation came Avalokiteswara, and he from his immaterial essence evolved the present world in which as an emanation the Mánushi Buddha Gautama appeared. How different is all this from the original teachings of the master. Indeed, in the later books, Buddha's name seldom appears and like the verses of the Vedas in the corresponding rites of the Saivas occurs only in some meaningless, jumbled mummery connected with the use of magical formulæ. Thus pure Buddhism disappeared and in its corrupted state formed an unholy alliance with degraded Bráhmanism of the Saiva type of which the Tántrikas are the followers and the Tantras,[1] the sacred books.

The Tantras.

The Tantras consist of separate treatises which inculcate the cult of deities male and female usually of terrible and hideous forms and often by bloody, obscene or cruel rites. They contain instructions for drawing up and filling the magical circles, the ritual to be used, the formulæ for the *Dháranis* and the mode in which the deities may be compelled to aid, protect or instruct. The simplicity of the primitive *Dhárani* ceases and an elaborate and somewhat philosophical ceremonial is subtituted, only again to degenerate by abuse into the most obscene and degrading orgies, unsurpassed in ancient or modern history. The *Dhárani* attained its object by a dedication and a repetition of the formulæ; the Tantras require contemplation and repetition and impose certain restrictions as to the object as well as to the person or class by whom the object is desired. As a chariot requires wheels so these advanced ceremonies require a skilled celebrant as leader who is able to perform a formal consecration and discover a fit place for their performance. They vary

[1] There are four classes of Buddhist Tantras: (1) *Kriya*, which treat of action: (2) *Achára*, of practice: (3) *Yoga*, of mysticism: and (4) *Anottara Yoga*, of superior *Yoga*. Csoma., Dict., p. 245.

with their objects and the influence which the Bodhisattwa to whom they are dedicated exerts on the particular object desired. The real principle underlying the whole teachings of the Tantras is that while the lesser and great *Yánas* prescribe long and tedious ceremonies and a succession of re-births for the attainment of the divine state, this can be more readily and quickly arrived at by the practice of magic and attainment of *Siddhi*. The worshipper takes a deity as his guide and by certain formulæ makes his own body, soul and mind, the reflection of the body, soul and mind of the deity, and he himself eventually becomes the deity with all his power and thus arrives at the accomplishment of his wishes. In Tibet, the great Yaksha Vajrapáni, the *alter ego* of Avalokiteswara is the Bodhisattwa of magic and there the compartments of the magic circle are often filled with the figures or names of Amitábha, Avalokiteswara, the various female energies and the maker at once obtains the power of these deities and the right to use their peculiar spells for his own purposes. It is in these rites also that we find 'le culte impur et grossier des personifications du principe female.' The *Suvarna-prabhása*, a Tantrik work which is included amongst the nine Dharmas in Nepál and is highly valued there, calls Buddha by the name Bhagwán and invokes Sarasvati and honours Mahádevi. In the *Samvarodya Tantra* there is nothing to recall Buddhism to the reader's mind beyond the occasional appearance of Buddha's name. It is full of magical formulæ. Some of the materials used in incantations are the human hair collected in cemeteries and hair from parts of the bodies of camels, dogs and asses. In the chapter on spells the adoration of the Saivite female energies is inculcated and Mahákála is mentioned by name. 'Om! adoration to Mahákála who dwells at the burning-ghát.' The linga even is proclaimed an object of worship. The means for destroying an enemy by tracing certain magical formulæ are also given and at the end is a chapter full of obscene practices not a whit above the most degraded of the Saivite orgies. The ritual to be observed when a living Yogini represents the female energy is also given and the whole is written in a form of Sanskrit, most barbarously incorrect. The *Mahákála-Tantra* shows the union between Saivism and Buddhism even more completely. It is full of the same gross symbolism and magical rites as the preceding and contains formulæ,

into which amongst other ingredients enters the gall of a cat, for preparing an ointment by which the native can become invisible or obtain the woman whom he desires or discover hidden treasure or obtain supreme temporal power or destroy the man whom he hates, &c. Mahákála is addressed in the verse :—"Om! adoration to Sri Mahákála who has the names of Nandikeswari and Adhimuktika and who dwells in the burning ghâts of Kashmír;" doubtless referring to the western and montane origin of the cult. The *Pancha-krama* though attributed to Nágárjuna is based on the Yoga teachings of Aryasanga and is exclusively devoted to an exposition of Tantrik practices foreign alike to the original teachings of both the Yogáchárya and Mádhyamika schools. It contains instructions for all classes of magical circles and formulæ and in it occur those absurd and unintelligible monosyllables regarding which Bournouf expresses himself so strongly :—'It is difficult to express the feeling of discouragement one feels in wading through these writings. It is sad to see men of experience and position soberly proposing the use of syllables without meaning as a means of arriving at bodily or spiritual welfare although the moral perfection desired be only quietism or indifferentism. Still this state is so distorted and exaggerated as to demand the abolition of all distinction between right and wrong, good or evil. This work, in fact, conducts the devotee gradually to the practice of enormities which never belonged to the principles or practice of early Buddhism. To take one example from the last chapter which treats of the indifference to external objects to which every effort of the devotee should tend it is laid down that to the true devotee, his enemy or himself, his wife or his daughter, his mother or a prostitute, in fact everything should be equally indifferent.' The *Kála-chakra*, another great Tantrik work, was introduced from the north into India in the tenth century according to M. Csoma, and thence into Tibet in the eleventh century. Amongst the many Tibetan Tantrika works analysed by the same writer we have the *Vajra-Varáhi*, sacred to Varáhi, one of the divine mothers, and in another work she is the principal speaker, whilst Bhagwán is identified with Vajrasattwa, the sixth Dhyáni Buddha of the Tantras supposed to represent the sixth sense (*Manas*) and the sixth sensible object (*Dharma*), and the *Prajna-Páramita* is called Bhagavati, his female

energy. In the *Vajra-Mahábhairava*, the Sakti is represented as black and naked and of terrible form. It is worthy of notice that all these three works were translated into Tibetan by Indians, a fact which would indicate their Indian origin. There are treatises also devoted to the worship of Uma, Síta, Tára, Kárttikeya and other of the Saiva deities.

Further assimilation of Sivaite practices.

Enough has been written to show the intimate connection between the corrupted Buddhism and the Saivism of mediæval India and the remarkable parallel they exhibit to the condition of the Christian religion in Europe at the same period. The Buddhist Tantras exhibit traces of every successive stage in the development of Buddhism. For primitive Buddhism we have the occasional use of Buddha's name and the worship of his image: Amitábha represents the Dhyáni Buddhas and Avalokiteswara the Bodhisattwas, whilst monotheistic Buddhism appears as adi-Buddha. But mixed with these we have shreds and fragments of all forms of religious belief indigenous and foreign and scraps from the teachings of every school blended together in a more or less coherent nihilism. The female energies were borrowed from the Saivas *en bloc* and with them came the necessity for giving female counterparts to the Buddhistic deities and the acceptance of the entire Tantrik ritual. As amongst professing Buddhists the terrible form of Siva's consort is, the one more commonly invoked and strangest of all there is reason to believe that her worship amongst some Buddhists was often attended with bloody rites. Buddha is dethroned and his place is occupied by the superhuman personages who are more at the call of the worshippers and thus subservient to the common herd. It was, doubtless, their struggle for popularity that opened the door to these degrading beliefs. The Buddhists saw that the Pásupatas were gaining ground with the people and that the Saivas had adopted the Pásupatas and their doctrines as part of their own system, and in turn the Buddhists declared these foreign elements of Saivism to be merely forms of their own, some of those convenient emanations of Buddhist intelligences undertaken to protect the faith. The Pásupatas and Buddhists alike rejected the authority of the Vedas and each was popular in its own way with the masses and probably agreed to unite against the Vaishnavas who represented

the old beliefs. Thus we find both Buddha and Saiva images carved on the walls of the rock-cut temples of western India, and in the existing books of the Nepálese Buddhists, the Sakti of Siva promises to the devout Buddhist who follows their directions her sovereign protection, and all this is inculcated in the name of Buddha and in some cases the instructions are said to have been taken down from his lips! There is undoubtedly a difference to be observed between the teaching of the earlier Mádhyamika school and that of the later Yogáchárya school. In the former the Buddhist retains his belief in Buddha and asks the Saiva deities to reward him because of such belief by the magical benefits that they can confer: in the latter he is as much as possible a Saiva himself. In the former he regards the Saiva deities as beings of superhuman power and knowledge, but holds them to be inferior to Buddha, but in the latter Buddha is seldom ever named. In the older works the Saiva deities are merely the guardians and protectors of the faith and are in practice the gatekeepers and watchmen of the shrine. A similar position is assigned to some of the non-Bráhmanical deities at the principal temples to the present day. Thus in Benares, Bhaironnáth is the watchman of all the Saiva shrines. At Jageswar beyond Almora we have Kshetrpál, at Badarináth, Ghantakarn; at Kedárnáth Bhairava and at Tungnáth, Kal-Bhairon. The approach to the hill temples is first marked by the *Deodekhni* or place from which the first glimpse of the shrine is obtained, then comes a small temple dedicated to the watchman and then the shrine itself. It is thus that the village gods were first admitted to the orthodox shrines and eventually the more popular such as Ganesha and the Saktis were admitted within the shrines. At the entrance of the magnificent Chaitya cave at Kárle in the Bombay Presidency is a temple dedicated[1] to Ekvirya, one of the divine mothers. The figure is carved on the rock and whether representing some other deity and afterwards transferred to the worship of Ekvirya or originally intended for Ekvirya, the principle is the same. She here acts the part of watchman. It is probable that this was the position of Saivism towards Buddhism when these rock-cut temples were excavated, for they must, according

[1] The present temple was built by Baji Rao, who for this purpose tore down the lion-pillar at the right of the outer screen and parts of the screen itself. Ekvirya is probably the Dravidian Akkaveyár.

to all evidence, have been executed before the Tantrik alliance between Saivism and Buddhism took place in the tenth or eleventh century. At that time, too, there was this doctrine common to both Bauddha and Saiva ascetics that each had to work out their own salvation and owe to their own efforts success in overcoming the world.

Buddhism in Nepál.

In Nepál alone have we any indications of existing Buddhism in India proper, and there the Buddhist religion of the present day is such as we have endeavoured to sketch, a curious admixture of the doctrines of the great *Yána* and the worship of the Brahmanical deities especially those forms to which the later Tantras are devoted. We have also a number of indigenous deities which are either spontaneous emanations of matter or have been evolved from the adi-Buddha identified with Bhagwán and who belong to the later montane development of Buddhism. In union with these is the worship of Siva as Pasupati and the cult of Hanumán, Ganesha and Mahákála. In Buddhist temples in Nepál, images of these deities and Ravan and Hariti or Sítala are found side by side with those dedicated to Sákya and other Buddhas and Bodhisattwas. Wilson,[1] in his notice of Nepál, writes:—"The spirit of polytheism, always an accommodating one, is particularly so in this country and the legends and localities of one sect are so readily appropriated by another that it speedily becomes difficult to assign them to their original source. In like manner formulæ and ceremonies very soon become common property and whatever may be the ruling principles, the popular practice easily adopts a variety of rites that are peculiar to different creeds." Elsewhere he remarks that it is not extraordinary that the principal members of the Hindu pantheon should be admitted by Buddhists to some degree of reverence, for there is nothing in their religion negative of the existence of such beings and the popularity of those deities amongst the Hindus would recommend their worship; but the Sákta form of Hinduism which subsequently overspread both the Kumaon and Nepál Himálaya is a comparatively obscure and unavowed innovation and had not, therefore, the same claims to consideration. He, therefore, concludes that the knowledge of the Tantras came to this portion of

[1] Works, II., 2, 28.

the Himálaya direct from their sources in the plains of India and that this took place about the twelfth century. The forms of Sakti in Kumaon have now, with few exceptions, developed into mere forms of the Sakti of either Siva or Vishnu. There are no professed Buddhists and not one image of Sákya Sinha, though a few days' march across the river Káli, Buddhist temples are to be found.[1]

Bonpas of Tibet.

One of the indigenous elements which entered into the Buddhist and indeed Saiva conception of the Saktis in their more terrible forms may be referred with some certainty to the pre-Buddhistic belief of the Tibetans known as the Bon or Pon religion. This doubtless has received developments varying with the influences to which it has been subjected, but clearly on the same lines as corrupted Saivism. It is an integral part of popular Buddhism in eastern Tibet where there are still some wealthy Bonpo monasteries. Hodgson in one of his papers gives drawings of Bonpo deities which are clearly saturated with the Saiva Sáktism of the Káli type. There are no temples of this sect in the Himálaya, though the name still lingers amongst the exorcists of such tribes as the Múrmis and Sunwars. Nor is the system peculiar to Tibet, for traces of it are found amongst the degraded practices of the Bráhmanists in southern India and even amongst the Buddhists of Ceylon, Barma, Siám and Java. The germs of Sáktism and Tántrik practices appear to have been the common inheritance of all the pre-Aryan tribes. As observed by Hodgson :—"I suppose that the Tántrika admixture must have existed in the prior superstitions of the sons of Túr forming the pristine sole population of all those countries (India and other Buddhist countries) because those superstitions as still extant amongst the *disjecta membra* of that population wherever found exhibit a prevalent Tántrika character (a mixture of ferocity, lust and mummery) and bear everywhere from Siberia to Ceylon a resemblance that amounts to identity." According to Tibetan

[1] The earliest form of Sakti in Nepál was Gujeswari, "that mysterious portion of *Prajna*, born of a lotus with three leaves by the will of Manjudeva, void of being, the personification of desire, favourable to many and praised by Brahma, Siva and Vishnu who in Durga, the giver of boons was manifested." The Bodhisattwa Manjusri drained the serpent's tank in the Nepál valley and when the waters had run out, the luminous form of Buddha appeared. Manjusri desired to build a temple to Buddha, but water bubbled up so fast that he could not find a foundation. He then prayed to Buddha and Gujeswari (the goddess of hidden form) appeared and compelled the waters to subside and Manjusri established her worship near the temple of Pasupati.

accounts the first ruler of the Pons was Rúpati, an Indian prince who fled to Tibet to avoid the war between the Pándavas and Kauravas. After a long interval another Indian prince called Nah-Thi-Tsanpo or Nyá-Khri-Tsanpo, said by some to be a Lichchhavi of Vaisáli near Patna and by others to be the fifth son of king Prasenajit of Kosala, arrived in Tibet and established a second Indian dynasty amongst the Pons. The legend runs that an infant Nah-Thi was exposed by his parents in a copper vessel which floated down the Ganges and was found by an old peasant who saved the child and brought him up as his own. On arriving at man's estate and being informed of the circumstances of his birth the young prince made his way to Tibet and was received by the Pons, who hailed him as king. Under Di-gum-Tsanpo, the eighth in descent from Nah-Thi, the Pon religion had been established in Tibet in its first stage or *Jola-Bon*. The Bonpo of that age were skilled in witchcraft, the performance of mystical rites for the suppression of evil spirits and man-eating goblins of the lower regions, for appeasing the wrath of the malignant spirits of the middle region (the earth) and for the invocation of the beneficent deities above. Di-Gum-Tsanpo was assassinated, and the people not knowing how to perform the correct funeral ceremonies invited three priests to perform his obsequies; one from Kashmír, one from the Dusha country and one from Shan-shun. These introduced the second stage called *Khyar-Bon*, or 'erroneous Bon'. One was able to travel in the sky mounted on a tambourine, to discover mines and to perform various miraculous feats; another was skilled in delivering oracles and telling fortunes and in interpreting the omens discovered by examining a fresh human shoulder-blade, whilst the third was especially learned in funeral ceremonies. This stage borrowed largely from the Saiva doctrines of the Tírthikas. The third stage is called the *Gyur-Bon* or 'the resultant Bon,' and exists to the present day.

The Lichchhavi prince Nah-Thi is popularly supposed to be the first protector if not organiser of the Bon religion, and this may be noted that Svasti was the tutelary deity of his house. Hence, perhaps, the mystic emblem *svastika* which is still used by the Bonpas under the name *Yun-drun*.[1] The Bonpas possess a

[1] In the Bonpo *svastika* the arms are turned in the opposite direction. In the same way they circumambulate an image from right to left and not from left to right like the Buddhists.

considerable literature, but much of it is borrowed from the Tantras and the modern practice varies little in spirit from the more corrupted forms of both Saiva and Buddhist beliefs. The names alone are changed. Emancipation is sought by meditation on the Bonku or supreme ideal, and this may be attained by following the instructions given in the Bon scripture.

The French missionaries in eastern Tibet call the Bonpas by the name Peun-bo and state that the sect is now declining in importance and is held in little esteem. From an account of a visit to one of their temples, the following extract is given by Yule: "In this temple are the monstrous idols of the sect of Peunbo, horrid figures whose features only Satan could have inspired. They are disposed about the enclosure according to their power and seniority; above the pagoda is a loft, the nooks of which are crammed with all kinds of diabolical trumpery; little idols of wood or copper, hideous masques of men and animals, superstitious Lama vestments, drums, trumpets of human bones, sacrificial vessels. .... Besides the infernal paintings on the walls eight or nine monstrous idols seated at the inner end of the pagoda were calculated by their size and appearance to inspire awe. In the middle was *Tamba-shi-rob*, the great doctor[1] of the sect of the Peunbo, squatted with his right arm outside his red scarf and holding in his left hand the vase of knowledge .... On his right hand was *Keumta-zon-bo* the 'all good' .... with ten hands and three heads, one over the other .... At his right is *Dreuma*, the most celebrated goddess of the sect. On the left of the first was another goddess whose name they never could tell me. On the left again of this anonymous goddess appeared *Tam-pla-mi-ber* .... a monstrous dwarf environed by flames and his head garnished with a diadem of skulls. He trod with one foot on the head of Shakya-tupa (Buddha)." In this very interesting extract we have evidence of the common origin of the Saiva Sáktism and the Bon religion as it now exists. Both unite in their hostility to Buddha and his teaching.

[1] According to Schlagentweit as quoted by Yule it is correctly *b*stampa *g*Shen-rabs or the doctrine of Shen-raba who founded the Pon religion, and the second name is Kuntu-*b*zang-po.

M. Csoma identifies[1] the Bonpa of Tibet with the Chinese sect Taotse founded by one Laotse in 604-523 B. C. Both adopt the doctrine of annihilation after death and hence their Tibetan name of 'Finitimists.' (*Mu-stegs-pa*). General Cunningham remarks that:—"According to the Tibetans, they were indecent in their dress and grossly atheistical in their principles. They called themselves '*Tirthakaras*' or 'pure doers'; and the synonymous name of 'Punya' (the pure) was carried with them into Tibet, where it became celebrated for ages and where it still survives as *Pon* amongst the Finitimists of the eastern province of Kham." Mr. Jaeschke, as quoted by Yule, states:—'So much seems to be certain that it (Bonpo) was the ancient religion of Tibet before Buddhism penetrated into the country, and that even at later periods it several times gained the ascendancy when the secular power was of a disposition averse to the Lamaitic hierarchy. Another opinion is that the Bon religion was originally a mere Fetishism and related to or identical with Shamanism; this appears to me very probable and easy to reconcile with the former supposition, for it may afterwards on becoming acquainted with the Chinese doctrine of the Taotse have adorned itself with many of its tenets. The Bonpos are by all Buddhists regarded as heretics and have always been persecuted by the Lamaitic hierarchy in Tibet.

Sankara Acbárya.

In all the local accounts of the origin of the existing temples in Garhwál and Jaunsár and of the revival of Bráhmanism in southern India, the name of Sankara Achárya is given as he who rehabilitated the worship of the ancient deities which had suffered at the hands of Buddhists and Atheists. We have fortunately means for verifying this tradition in the *Dig-vijaya*[2] of Ananda-giri, a pupil of Sankara. This work gives an account of the travels of Sankara and the controversies held by him in different countries and forms altogether a valuable record of the state of religion in his time. A second work entitled *Sankara-vijaya*[3] was compiled by Mádhava Achárya,

[1] See Hodgson, J. R. A. S., XVII., 396: Cunningham's Ladak, p. 356: Yule's Marco Polo, I., 285: Desgodins' Mission du Tibet, p. 240: Schlagentweit's Buddhism in Tibet, p. 74: Sarat Chandra Das in J. A. S. Ben. L., li. [2] The conquest of the points of the compass or the world. It is analysed by Professor Wilson in As. Res., XVI., 1. Sankara is said to have been the offspring of adultery, for which his mother was expelled from her caste, and Sankara was obliged to perform her funeral obsequies assisted by Sudras. [3] Also noticed by Professor Wilson.

the minister of one of the Vijayanagar Rajas in the early part of the fourteenth century. Sankara was born at Kallady in Travankor in the Nambúri tribe of Brahmans[1] and at an early age devoted himself to study and a religious life. His great object was to spread and expound the tenets of the Vedanta philosophy,[2] and for this purpose he wandered from his native Maláyalam (the abode of hills) to the Himálaya (the abode of snow), preaching and teaching wherever he went and holding disputations with the professors of every other faith. He made converts from every sect and class and established *maths* or monasteries for his disciples—the Sringeri-math on the Tungabhadra in Mysore to the south : the Jyotir-math (*vulgo* Joshi-math) near Badarináth to the north: the Sárada-math at Dwáraka to the west and the Vardhana-math at Puri in Orissa to the east. Sankara towards the close of his life visited Kashmír, where he overcame his opponents and was enthroned in the chair of Sarasvati, the goddess of eloquence.[3] He next visited Badari, where he restored the ruined temples of Naráyan, and finally proceeded to Kedár, where he died at the early age of thirty-two. He is regarded by his followers as an incarnation of Siva and appears to have exercised more influence on the religious opinions of his countrymen than any other teacher in modern times. All accounts give him four principal disciples whose pupils became

[1] Mad. J. Lit. Sc., 1878, p. 172. [2] For an exposition of the tenets of the Vedántists see the Vedánta Sara *ed.* Roer, Calcutta, 1845. It professes to be based on the Upanishads and the formula '*ekam evádwityam*,' 'one only without a second.' As observed by Professor Williams (Hinduism, p. 204):—'Here we have presented to us a different view of the origin of the world. In the Nyáya it proceeded from a concurrence of eternal atoms: in the Sánkhya from one original eternal element called Prakriti; both operating independently though associating with eternal souls and, according to one view, presided over by a supreme soul. But, in the Vedánta, there is really no material world at all as distinct from the universal soul. Hence the doctrine of this school is called '*adwaita*' or 'non-dualism.' The universe exists but merely as a form of one eternal essence.' * * * This essence called Brahma is to the external world what yarn is to cloth, what milk is to curds, what clay is to a jar, what gold is to a bracelet. This essence is both creator and creation, actor and act. It is itself existence, knowledge and joy; but, at the same time, without parts, unbound by qualities, without action, without emotion, having no consciousness such as denoted by 'I.' and 'thou,' apprehending no person or thing, nor apprehended by any, having neither beginning nor end, immutable, the only real entity. If this be true then pure being must be almost identical with pure nothing, so that the two extremes of Buddhistic nihilism and Vedántic pantheism, far as they profess to be apart appear in the end to meet." See also Professor K. T. Telang's paper on the *Sankara-Vijaya* in Ind. Ant., V., 287. [3] In the local history of Nepál it is recorded that during the reign of Bárdeva raja, a Brahman who was an incarnation of Sankara Achárya came into Nepál to see whether the rules and customs established by that great reformer were still in force. He found them observed everywhere owing to the directions of Bandhudatta Achárya, who had preceded him. Wright's Nepál, 152.

the heads of the order of Das-námi Dandins or Ten-named mendicants.

His works and teaching.

Sankara was a voluminous writer and has left many original compositions besides commentaries on the Bhagavad-gíta, Mahábhárata, Vedánta Sara and Taittiríya, Aitareya, Kena, Isa, Katha, Prasna, Múndaka, Mandukya, Chhandogya and Brihad Aranyaka Upanishads and the Vishnu Sahasranáma.[1] From a comparison of the list of sectaries existing in the time of Sankara, it would appear, that since very considerable changes have occurred in the popular religion, and that although the broad features of the system remain as before many of the particular objects of reverence have disappeared. This may, in a great measure, be fairly attributed to the exertions of Sankara and his disciples. Professor Wilson,[2] correctly observes that it was no part of Sankara's object to suppress acts of outward devotion, or the preferential worship of any acknowledged and pre-eminent deity. "His leading tenet is the recognition of Brahma Parabrahma as the sole cause and supreme ruler of the universe and as distinct from Siva, Vishnu, Brahma or any individual member of the pantheon. With this admission, and having regard to the weakness of those human faculties which cannot elevate themselves to the conception of the inscrutable first cause, the observance of such rites and the worship of such deities as are either prescribed by the Vedas or the works not incompatible with their authority were left undisturbed by Sankara. They even received to a certain extent his particular sanction and certain divisions of the Hindu faith were, by his express permission, taught by some of his disciples, and are, consequently, regarded by the learned Brahmans in general as the only orthodox and allowable forms in the present day." For thus Sankara addressed his disciples:—"In the present impure age, the bud of wisdom being blighted in iniquity, men are inadequate to the apprehension of pure unity; they will be apt, therefore, again to follow the dictates of their own fancies, and it is necessary for the preservation of the world and the maintenance of civil and religious distinctions, to acknowledge those

[1] The first seven Upanishads mentioned in the text have been translated by Roer, Calcutta, 1853: the Vedánta Sara by the same, 1845, and portions of the commentaries on the Upanishads are also to be found in Muir's works. [2] Wilson's works, I., 27.

modifications of the divine spirit which are the work of the Supreme." The divisions (*Panchaitana*) sanctioned by Sankara were (1) the Saiva taught at Benares by Paramata Kálánala who assumed the style of a Dandin : (2) the Vaishnava, taught at Kánchi by Lakshmana Achárya and Hastámalaka, the latter of whom introduced the worship of Krishna: (3) the Saura, instructed by Divákara Brahmachári; (4) the Sákta, by Tripura Kumára Sannyási: (5) the Gánapatya, under the auspices of Girijaputra, and (6) from all who had not adopted the preceding systems, Batukanáth, the professor of the Kápálika or Bhairava worship was allowed to attract disciples. These broad divisions, also, very fairly represent those which exist at the present day.

Siva.

The most ancient and most celebrated Saiva shrines in the Himálaya are undoubtedly those connected with the Kedár establishment in Garhwál, and here also we have the principal seat of the worship of that element of the Siva of to-day which was formerly known as Pasupati. Although he is here called Sadashiu, and the name Pasupati is not formally applied to him in Garhwál and occurs only as Pasupateswar at Jageswar in Kumaon, the local legends connected with Kedár supply the evidence required. The story runs that the Pándavas by command of Vyása retired to the Himálaya and approached the Mandákini to worship Mahádeva. In their eagerness they desired to touch the person of the god, but Mahádeva avoided them and dived into the bowels of the earth, vouchsafing to his votaries the view only of the lower portion of his body. The upper portion of his body is said to have come to the surface at Mukhár Bind in Nepál, where it is worshipped as Pasupatináth. The Pándavas, however, were freed from the guilt of their great sin and in gratitude built the five temples to the god's hinder parts which now form the five or Panch Kedár :— Kedárnáth, Madhya Maheshwar, Rudrnáth, Tunganáth and Kalpeswar. Then arose a race who cared not for these things and allying themselves with unbelievers abandoned the worship of Siva, so that the temples to 'the great god' fell into decay and Mahádeo in his own home had no honour whatsoever. This condition of religion in the Himálaya lasted until the arrival of Sankara Achárya, who subdued his opponents in many a controversy

and rehabilitated the worship of Siva and Vishnu and the efficacy of pilgrimages which, as the local legend[1] quaintly argues, kill two birds with the one stone, health to the body from change of air and benefit to the soul from worshipping the gods. Before proceeding to describe the temples to Pasupati in the Kedár Hímálaya we shall examine some of the scattered references to this form of Siva to be found elsewhere.

Pasupati in Nepál.

In the Nepál annals it is recorded how the Bodhisattwa Avalokiteswara had prophesied that Pasupati, lord of Uma, should be very celebrated in the Káli Yug. Subsequently Krakuchchhanda Buddha came from Kshemavati to the Nepál valley, and showed his disciples the Bráhmanical triad in the shape of deer wandering in the sacred forest. After this, Maheswara (Siva) manifested himself in the form of light (the fiery ling) and astonished on seeing this "Brahma went upwards to see how far the light extended and Vishnu went downwards for the same purpose." On returning they met at Sesh Náráyana, and Vishnu declared that he had not been able to find the limit to which the light extended, but Brahma said that he had gone beyond it. Vishnu, then, called upon Kamadhenu, the celestial cow, to bear witness, and she corroborated Brahma with her mouth, but shook her tail by way of denying the truth of the statement. Vishnu seeing from this what had really occurred cursed Brahma that he should never again be worshipped and cursed the cow that her mouth should be impure, but that her tail should be held sacred. The same story is told in the Linga Purána[2] by Brahma as Pitámaha, with the omission of the statement that he had found the end of the ling, but the local legend is valuable in showing that the decline of the worship of Brahma was attributed to the opposition made by his followers to the preferential worship of Siva, and that while a reconciliation was effected between the Vaishnavas and Saivas, the followers of Brahma were cursed as irreconcilable.[3] The forest where the meeting took place was called

[1] '*ek panth, do káj*,' or 'one road, two objects accomplished.' [2] Muir, IV., 388. The Satapatha Brahmana ascribes the falling off of the worship of Brahma to his passion for his daughter: see Muir, I, 25,63, 108, 112: IV, 47. The tail of the cow forms an instrument in the marriage ceremony and the tail of the wild cow or *chauri*, though now handled by cow-killing chamárs as grooms, was long the sacred symbol of power. [3] Later on Mahádeva is said to have settled in Nepál as Pasupati in the form of light by direction of Buddha. Wright, p 89.

Sleshmántak-ban[1] and "some inspired devotees say that it was so called because Mahádeva having come from Badari-Kedár showed himself in it."

The story of Birúpáksha related in the same records affords some further matter of interest. Some say that he was a Daitya, some that he was a Brahman and some that he was a Kshatriya Rája. When twelve years of age, he learned from his horoscope that he should commit a dreadful crime and left his home to avoid it, but in his travels discovered that the sin had unwittingly been incurred. He, then, applied to Siva for relief, who told him to drink twelve loads of melted copper, but as Birúpáksha knew that this would kill him, he consulted a bhikshu who advised him to recite certain holy names. After completing his task, he came across a ling of Siva, and began to break every emblem of the kind that he met, saying "it was you who advised me to lose my life." "At last he came to Pasupati, who prayed to Buddha to save him, and through the blessing of Buddha and being provided with a head-dress of Buddh, Birúpáksha instead of breaking the idol worshipped it. For this reason every linga emblem of Siva in Nepál is a little bent on one side except that at Pasupati." Here we have other evidence of the blending of the Saiva with the Bauddha worship. It is also recorded that it was from hearing the preceding accounts that Dharmadatta, a prince of Kánchi or Conjeveram near Madras, proceeded to Nepál and expelling the native Kiráta dynasty, established himself there and built the existing temple of Pasupati. This afterwards fell into ruin and was re-built by the Gwála dynasty who flourished in the time of Krishna and again by the Sombansi dynasty some twenty generations after Asoka, who lived in the third century before Christ. From these statements we may fairly conclude that the legend of Siva as Pasupati is common to the Kumaon and Nepál Himálaya, that in the latter tract the worship of this form was not opposed by the Buddhists, and that there was an early connection between the Himálayan worship of Siva and his worship in the south of India.[2]

Pasupati.

In the Mahábhárata, Pasupati is 'the lord of animals,' to whom are sacred 'the five kinds of animals—kine, horses, men, goats and sheep.'

[1] The phlegm destroyer. *Cordia latifolia.* [2] Cape Comorin derives its name from Kumári, one of the names of the consort of Siva.

He delights in bloody sacrifices and it was for him that Jarásandha kept the captive princes, "sprinkled for slaughter and devoted as victims like beasts" which so roused the ire of Krishna.[1] In the Aitareya Bráhmana,[2] Pasupati is identified with Rudra as Bhútapati or 'lord of dreadful forms,' in the Satapatha Bráhmana the name is given to Agni,[3] and again, in the Mahábhárata, to Varuna, as part of Rudra.[4] When Arjuna sought the Pásupata weapon from Siva, he found the deity attended by his Bhútas or goblins, and the name of Pasupati occurs in the Rudra hymn or *Satarudriya* as an epithet of Rudra. Thus in the older writings we have the term identified with the fiercer form of Siva, that which leads the worshippers to offer blood as pleasing to the deity not necessarily as a propitiation for their sins. The followers of this form comprised a separate class known as Pásupatas, guided by instructions supposed to have been written by Siva himself.[5] They existed in the time of Sankara Achárya and bore as their sectarial marks a linga on the forehead, breast, arms and navel, and even so late as the time of Mádhava, who records that the Pásupata Abhinava Gupta taught the *mantra* worship of Siva. They have since, however, merged in the Jogis, especially the Kánphatas, of whom more hereafter.

Kedárnáth.

We now return to the temple of Kedárnáth which is situated in Patti Maikhanda below the great peak of Mahápanth. Besides the temple itself, sacred to the Sadáshiu form of Siva as 'lord of Kedár,' there are several places of pilgrimage in the immediate neighbourhood, chief of which are the Swarga-rohini, Bhrigupanth, Reta-kund, Hansa-kund, Sindhu-sagar, Tribeni-tírtha and Mahápanth. At the last named is the celebrated cliff called the Bhairava Jhamp from which pilgrims used to precipitate themselves as an offering to Siva. The practice has been prohibited by the British Government and is not now encouraged by the priests, and shorn of the eclat and splendour of the procession and music which in former days accompanied the victims to the fatal leap, there is little attraction left to induce others to imitate them. A second form of self-immolation obtained in

[1] Muir, IV., 289, 336. [2] *Ibid.*, I., 108. [3] *Ibid.*, II., 202, [4] *Ibid.*, I., 444. [5] *Ibid.*, III., 202: Wilson, I., 11: III, 59: and Hodgson, J.R.A.S., XVII., 393, where he shows the connection between Pasupati and Swayambhunáth of Nepál by extracts from the Swayambhu Purána.

former days, when fanatics wandered up the snowy slopes, until overcome by cold and exhaustion they lay down and slept the sleep that knows no waking. It is difficult to say whether this practice still continues. So many die from want, disease and the fatigue incidental to a journey of such length and hardship without any intention of deliberately offering up themselves as a sacrifice to the deity, that we may well demand some further evidence before the statement that the practice described is common can be accepted as proved. A popular belief exists that Siva frequently makes himself visible on the crest of the great peak and that the wreaths of smoke seen there from below are not the result of whirlwinds gathering up the finer particles of snow, but the smoke of sacrifice made by some highly favoured follower. As the holiest part of the holy, Kedár-khand, the entire tract comprising the Upper Pattis of Nágpur and Painkhanda abounds in places of pilgrimage, and here on the *Adha-Márgashírkh-upránt* all the gods and goddesses are said to assemble and engage in sports of various kinds and the noise of their talk and laughter is heard for miles around. It is known that curious sounds are heard in these elevated regions and have been variously accounted for. Some attribute them to the echo caused by falling trees or avalanches and it is true that owing to the purity of the air sound is carried to a great distance. The sweet smelling flowers and other vegetation found near the limits of eternal snow frequently overpower the traveller and combined with the rarefaction of the air cause a faintness which many attribute to the influence of superhuman powers. Natural physical influences are sufficient to account for these phenomena, but the ignorant consider all to be due to the pervading presence of the gods in this their peculiar home.

Tungnáth and Rudrnáth.

The temple at Tungnáth or Tunganáth[1] is situated on the Chandrasila peak, a few hundred feet below the summit which rises to a height of 12,071 feet above the level of the sea. Some derive the name '*tung*' with the sense of 'lofty' from the position of the temple on the highest peak outside the main chain of the Himálaya: others derive it from '*tangna*' 'to be suspended,' in allusion to the form under which

[1] There are other temples here unconnected with the Kedár endowment to Siva as Tungnáth:—at Maku also called Markadeswar; at Tíung, at Dhárail and at Phalási in Talla Nágpur.

the deity is here worshipped. The form is the Swayambhu Ling, and on the Shiurátri or 'night of Siva,' the true believer may, with the eye of faith, see the emblem increase in size, but "to the evil-minded no such favour is ever granted." Above the Rudrgádh, an affluent of the Bálásuti, is a great cave in which Siva is worshipped as Swayambhu Mukhár Bind, a close connection of the Nepál form as Swayambhu Pasupati. There is also a temple to his name and south of it is the Sarasvati kund or pool with a ling in the midst of it. In the pool there is a large fish which appears on the fourteenth of the dark half of each month and if propitiated with oblations grants the accomplishment of every wish of the faithful. The Kála pahár range in the neighbourhood of this temple is also known as the Rudra Himálaya. Madhmaheswar is situated near Gair at the head of the stream of the same name which joins the Mandákini near Gupt Káshi. It is supported from the endowment and revenues of Kedárnáth. Few pilgrims come here and the worship lasts only till the middle of October when snow falls and renders the track impassable. The temple to the form of Siva as Kalpeswar is at Urgam.

The chief priest at Kedár is usually styled Ráwal. He resides at Ukhimath and his place at Kedár is taken by one of his chelás or disciples, of whom several are always in attendance. The season of pilgrimage lasts for six months from the *akhaya* third of Baisákh to Bali's day in Kárttik; the great or fair day is the last day of Kárttik. The celebrants are of the Bedling division of the Nambúris from Maláyalam. The Madhmaheswar temple is served by Jangamas from Chitrakáli in Mysore. The Rudrnáth and Kalpeswar temples are tended by Dasnámi Gosáins and the Tungnáth establishment by Khasiya Brahmans who retire to Mako during the winter. Thus four out of five temples forming the Kedár establishment are still ministered to by priests from the Dakhin connected with Sankara Achárya: the Nambúris are of his tribe in Malabar: the Jangamas are puritan Lingáyats and the Dasnámi Gosáins were founded by Sankara's disciple

Other Siva temples.

There are other temples to Siva connected with the Kedárnáth endowment though not included in the Panch Kedár. Gupt Káshi or the 'invisible Benares' of the north possesses so many lings that the saying

"*Jitne kankar itne Sankar*"—"as many stones so many Sivas"—has passed into a common proverb to describe its holiness. Here, as in Benares, Siva is worshipped as Visvanáth and two dhárás known as the Jumna and Bhágirathi feed the pool sacred to the god. A portion of the Kedár establishment officiate here. At Ukhimath, the winter-quarters of the Ráwal of Kedárnáth, there is another temple to Siva managed by the Kedár priests. Next in importance to these is the Gopeswar[1] temple sacred to Siva as a '*Gopa*' or 'cowherd' and which marks the site where Parasuráma obtained from Siva the weapons with which he destroyed the Kshatriyas. The Mahábhárata[2] relates how Parasuráma obtained the axe of Siva by propitiating the deity on the Gandhamádana mountain, now Nar-Náráyan above Badrináth, but the local legend tells how a number of weapons were given and amongst them the trident (*trisúl*) which now stands in front of the Gopeswar temple and which has been noticed. The worship of the god is carried on by Jangam priests from Mysore as in Kedárnáth and festivals are held on Chait and Asan Naurátri and the Siurátri. Naleswar at Gartara in Malla Nágpur is celebrated as the place where Damayanti's Raja Nala propitiated Siva, but the temple is of only local importance and there is only a small establishment. At the confluence of the Mandákini and Alaknanda, there is a temple to Siva Rudra which gives its name to the neighbouring village and also marks the site of Nárada's worship of Siva. At Dungari, in Patti Taili Chandpur Siva is worshipped by Sanyásis as Sileswar, and the temple which is endowed is said to have existed from the institution of the era of Saliváhana in 78 A.D.! On a peak of the Dúdutoli range in Mawálsyún there is a temple to Siva as Binsar or Bineswar,[3] celebrated throughout all the lower pattis for its sanctity and power of working miracles. It was here that Ráni Karnávati was saved from her enemies by Siva, who destroyed them by a hail-storm, and from gratitude the Ráni built a new tower for the temple. One of the many legends concerning Binsar states that should any one take away anything belonging to the god or his worshippers from this place, an avenging spirit attends him and compels him conscience-stricken to restore it twenty-fold; nay, even the faithless

[1] There are three other temples to this form in Kumaon. [2] Muir, IV, 267. [3] There is a temple to Bineswar at Sauni in Silor.

and dishonest are reformed by a visit to Binsar. Hence the proverb :—

"*Bhái, Binsar ká lohá jánlo samajhlo.*"

Further, though the forests in the neighbourhood abound with tigers not one dare attack a pilgrim, owing to the protecting influence of the god. The temple of Anuka Bhairava at Bhatgaon in Patti Ghurdursyún has a similar reputation and cases are often amicably settled by an oath made by either party in presence of the deity there.

Koteswar Bhairava. Bhilwa Kedár.

The Koteswar temple is situated in Chalansyún about four miles from Srinagar, where the Koti Ling of Siva is set up. The Bhairava temple on the Langúr peak owes its origin to a Gwála having found a yellow-coloured stick which, on his attempting to cut it with an axe, poured forth drops of blood and frightened at the sight the Gwála fled only to be visited at night by Siva in his terrible form, who commanded him to set up his image here. On the summit of the mountain, the god is represented by a coloured stick somewhat in the form of a hooded snake. Bhilwa Kedár, where Arjun fought with Mahádeo and found him, appears to be an old foundation and is still held in high estimation. It is situate on the Khandapa-gádh about a mile west of Srinagar and marks the site of the following scene.[1] When Arjuna, following the advice of Indra, sought Mahádeo in his mountain home, the Rishis not knowing his object were alarmed and complained to Mahádeo, who assured them that there was no cause for apprehension, but as a precautionary measure took his arms and assuming the form of a Kiráta went to meet Arjuna. At that moment appeared a Dánava, in the form of a boar meditating an attack upon Arjuna, and seeing this, the Kiráta asked permission to shoot the animal as he was the first to take aim. But Arjuna refused and both shot together and killed the boar. Arjuna was wrath at the unsportsmanlike conduct of the stranger and threatened to kill him. The Kiráta retorted and said that he had aimed first and that he would kill Arjuna. The two then fought with a succession of weapons, arrows, swords, trees, stones, &c., until at length Arjuna fell exhausted.

[1] From the Vana parvan of the Mahábhárata: Muir, IV., 230: the local legend has for Kiráta, Bhilwa or Bhíl, a tribe utterly unknown in this Himálaya. The name appears to be really connected with the sacred *Ægle Marmelos* known as the *bilwa* or *bel*.

When Arjuna revived he found that his enemy was no other than Mahádeo and at once proceeded to worship him by falling at his feet. Mahádeo then expressed his admiration of Arjuna's prowess and offered him the choice of a boon and he chose the Pásupata weapon, which was accordingly given him after he had been warned as to the consequences of using it rashly. There is also a temple to Siva as Kránteswar or Kiránteswar, 'lord of the Kirántis,' on the peak of that name in Káli Kumaon.

Kamaleswar.

Kamaleswar in Srinagar itself is chiefly remarkable for the extent of its endowment. It is dedicated to Siva, as 'lord of the lotus,' and its origin is thus described in the local legends. When Ráma came to reside in the forests for the purpose of meditating on the great god, he settled for some time here and prepared to worship Siva with an offering of flowers. For this purpose he collected one thousand lotus flowers in honor of the Agni form of the god as Sahasrákhsa, 'the thousand-eyed', and proceeded to lay them before the deity, but found one wanting which the God himself had secretly removed to try his worshipper. Ráma supplied the place of the missing lotus (*kamala*) with one of his own eyes and ever since the form of Siva worshipped here is known as Kamaleswar. On the night of Baikunth 14th it is customary for women desirous of obtaining offspring to attend the services at this temple, with lamps alight, in the upturned palms of their hands; they remain the whole night standing before the god and in the morning, after bathing, offer oblations to the attendant priests. On the night of the *ghrit kamala* or *achala saptami* the body of the Mahant receives worship by shampooing and rubbing. The courtyard of the temple is then copiously sprinkled with Ganges water and the Mahant comes forth naked and lies on the ground whilst the assembled worshippers march in solemn procession around him. The services at this temple are conducted by Dásnámi Gosáins of the Puri section and the chief priest is called Mahant.

Jageswar.

Amongst the Saiva foundations in Kumaon, that of Jageswar, both from the extent of its endowment and the reputation for sanctity that it possesses, is the most important. It is frequently mentioned, as we have seen, in the *Mánasa-khanda* and keeps up a large establishment of *pandas*

or priests to minister before its numerous idols.[1] The great temple itself is situated on the village along which runs the road from Almora to Pithoragarh. Here Mahádeo is worshipped under the form Jyotir-Ling. The largest temples are those dedicated to Jageswar, Mrityunjaya, and Dandeswar, all of which are attributed to Visva-karman, the artificer of the gods. The great Vikramáditya[2] is said to have visited Jageswar and to have restored the temples of Mrityunjaya whilst a similar work was performed by Salivahana for the Jageswar temple. Then came Sankara Achárya, who remodelled the entire institution, and the temples were again repaired by the Katyúri Rajas. The pool near the temple is called Brahma-kund, bathing in which ensures salvation. Other smaller reservoirs are the Nárada, Súrya, Rishi, Krami, Reta and Vasishtha kunds. The great fairs are held on the Baisákh and Kárttik purnamásís (15th May and 10th November). Pilgrims also visit the shrine in Sáwan (July-August). Bloody sacrifices only occur to Kshetrpál, as guardian of the tract; the ordinary offerings consist only of the *panch-bali, i.e.*, milk, curds, ghi, honey and sugar which are placed on the idol, baths of hot and cold water being given between each of the five oblations. Like Kamaleswar, this temple is specially celebrated for its power of granting offspring, and here also women desirous of children stand the night long before the god with lamps alight in their hands. There are numerous legends connected with these temples and the minerals wrought which would be tedious and unprofitable to detail. A votive offering exists in the shape of an image in silver of a Paundra Raja holding a lamp in his hands. The story goes that the hands were formerly as high as the Raja's forehead and are now opposite his breast and when they reach his feet, his sins will be forgiven. There are also images of the Chand Rajas, Díp and Trimal. Near the temple is an excavation in which one Ridhpuri Gosáin, in the time of Udyot Chand, buried himself alive after having obtained a

[1] The following forms of the deity are worshipped in connection with this grant:—Jageswar, Briddh Jageswar, Bhándeswar, Mrityunjaya, Dandeswar, Gadáreswar, Kedár, Baijnáth, Baidyanáth, Bhairava, Chakrabákeswar, Nílkanth, Báleswar, Visveswar, Bágeswar, Báneswar, Mukteswar, Hundeswar, Kamaleswar, Jageswar, Hátkeswar, Pátál Bhubaneswar, Bhairaveswar, Lakhmeswar, Panch Kedár, Brahm Kapál, Kshetrpál or Shaimdyau and the female forms, Pushti, Chandika, Lachhmi Náráyani, Sítala and Maha Káli. Most of these are supposed to be parts of forms of the deity popular elsewhere. Briddh Jageswar is on the Almora road, about four miles from Jageswar, and Kshetrpál is about five miles off. [2] In Nepál also Vikramáditya is mentioned as the restorer of temples.

diamond ring from the Raja and in a short time afterwards the Raja received the ring from Hardwár, where the Gosáin had again appeared, 'a confidence trick still not uncommon in Upper India.' Dead bodies are brought from a distance to be burned at Jageswar in the midst of the holy tract and its hundred gods. The Pandas or priests of the temple are called Baroras, a word which is locally explained as a corruption of Bátuk, which again is applied to the offspring of a Sanyási who has broken the vow of celibacy. The ministrations at Jageswar were entrusted by Sankara Achárya to Kumára Swámi, a Jangam from the Dakhin, and he had with him a Dakhini Bhat who married the daughter of a Hill Brahman and thus gave rise to the Baroras, the present Pandas of Jagesar.

Names of Mahádeo.

In one verse of the Mahábhárata the sage Tandi is said to have propitiated Mahádeo by repeating his eleven thousand mystical names. Daksha when humbled repeats eight thousand names and Mahádeo is frequently credited with one thousand names. The last number is no exaggeration and could easily be verified. The names in common use may be divided into four classes: (1) the old names derived from the deities who together form the modern Siva; (2) those derived from the legends describing his exploits or some manifestation of his power; (3) those derived from the name of some place; and (4) those derived from the name of some person who has adopted him as their special or *ishta* deity. The latter two classes are very common in Kumaon: thus we have the phrases 'the Chaur Mahádeo,' 'the Naithána Devi,' like 'Our Lady of Loretto,' and Dípchandeswar, Udyatchandeswar forms worshipped in temples erected by Rajas Díp Chand and Udyot Chand, Nábdaleswar in Dehra Dún after a female named Nábda, and even Tularámeswar, the form worshipped in a temple erected by a petty banker named Tularám in Almora a few years ago! Many of the older names are found in passages quoted by Muir[2] and we shall now examine those of them which occur in the Kumaon Himálaya. Isána, 'the ruler,' for in this form Siva is the sun who rules (*ishte*) the universe, has a temple at Khola in Lakhanpur. He is called Rudra from '*rud*,' 'to weep,' because as a boy (*Kumára*) he appeared weeping before the gods and in this form he is Agni, the god of fire. He has

[1] Muir, IV., 196, 377. [2] *Ibid.*, 340, 360, 403.

several temples as Mahárudra, and Rudrnáth.[1] As Sarva (all) he is worshipped as Sarbeswar at Sahaikot in Patti Nágpur. This is one of the older names and is especially noted in the Satapatha Brahmana as a synonym for Agni amongst the eastern Báhíkas or people of the eastern Panjáb,[2] as Bhava was used by the western tribes. There is a temple to Siva as 'Trinetra,' 'the three-eyed,' at Surwál in Lakhanpur, a form which is explained by the following story from the Mahábhárata. Siva and Párvati were seated together on the Himálaya surrounded by their Bhútas (goblins) and Apsarasas (nymphs) when in a sportive moment Párvati placed her hands over her husband's eyes. Terrible results followed, the world was darkened, all were dismayed, oblations ceased, and the end of all things seemed near. Suddenly the gloom was dispelled by a great light which burst from Siva's forehead, in which a third eye, luminous as the sun, was formed. By the fire from this eye the Himálaya was scorched until Párvati, assuming a submissive attitude, stood before her lord and induced him to restore the mountains to their former condition.[3] As Trimukheswar Siva has a temple in Chaukot. As Droneswar he is worshipped in the centre of the tract known as Dronásrama in the eastern Dún near the Soma and Súswa rivers and receives offerings of *bel* leaves, incense, perfumes, rice and sandal-wood. As Chandreswar he also has a temple in the same locality, now called Chandrabani, and as Tapkeswar he is worshipped in a cave near Garhi on the Tons about five miles to the north of Dehra Dún. Siva is worshipped as Gokarneswar at Mádhorola in Seti, parganah Sor. Gokarna was a prince of Panchála who set up a celebrated Ling of Siva on the Malabar coast, of which a replica was brought to Nepál, and a portion of this again was placed at Mádhorola: so that we have here only a part of a part, but the efficacy of prayer to him is the same.

Saiva temples.

There is a temple to Nílkanth, 'Siva of the azure neck,' at Toli in Patti Udepur, a name due to his having drank the poison produced at the churning of the ocean. The gods discomfited by the Daityas fled to Vishnu for succour, and he directed them to cast all

[1] There are temples to Ughána Mahárudra at Papoli in Dánpur and at Dunya in Rangor. [2] See pages 280, 358. [3] Muir, IV., 270.

manner of medicinal herbs into the ocean of milk and then taking the mountain Mandara for a churning stick and the snake Vásuki for the rope, churned the ocean for nectar. In the process, Vásuki breathed forth a fiery poison, and the gods again distressed propitiated Siva, who swallowed up 'the deadly poison as if it had been nectar.' Hence he is called *Nílakantha*, *Nílagriva*, &c., and there are several temples to him as Níleswar. As lord of goblins, Bhútaneswar, he has a temple at Siri in Baraun and twe in Borávau and as chief of the Asuras, one at Gorang in Seti to the form Asureswar and one each to the forms Ekásur and Tadásur. Bhíma is an old name of Rudra and there is a temple to Siva as Bhímeswar at Bhím Tál. As Pinákeswar or Pinnáth, the bearer of the bow Pinákin, Siva has a temple in Borárau. There are also temples to him as Síteswar and Rámeswar, the latter of which is situated at the confluence of the Rámganga and Sarju rivers and also marks the scene of the apotheosis of Ráma himself. There is a second Rámeswar in Dehra Dún. There are two temples in Srinagar to Siva as Narmadeswar or 'lord of the river Nerbudda.' There is one large temple to him as Mrityunjaya, 'the conqueror of death,' at Jageswar, one at Dwára and one at Aserh in Karákot. As Kalajít he has a temple at Kándi and as Karmajít one at Pílu, both in Talli Kálipháț, and there is also a temple to his name at Lákhamandal in Khat Bhondar of Jaunsár which local tradition asserts was built by Sankara Achárya. Both Siva and Vishnu are invoked at the festival held for bathing at the Sahasradhára pool near Dehra. The Bágeswar establishment is also an old one and the story connected with it has already been told in the Mánasa-khanda. The temple is situated at the confluence of the Gomati and Sarju rivers in Patti Talla Katyúra. There are two great fairs held here, but as they have more of a commercial than a religious character, the will be noticed elsewhere. The legend regarding the Pátál Bhubaneswar has also been told. The Pacheswar temple honours the junction of the Sarju and the Káli and other less known temples, the *prayágas* or junctions of every considerable rivulet in the Kumaon Himálaya. The temples at Champáwat are undoubtedly of considerable antiquity and the remains there are well worthy of a visit. Again at Dwára we have an immense number of temples scattered about in groups, most of which are now in ruins and serve

merely as straw-lofts for the villagers. Besides temples, in many places conspicuous boulders and rocks are dedicated to Siva in his many forms, chiefly as lord of the Nágas and as identified with the village gods Goril, Chamu, &c. The worship of the more orthodox forms of Siva is conducted by Dásnámi Gosáins, chiefly of the Giri Purí, Bhárati and Sáraswati divisions. The Nágrája and Bhairava temples are served by Jogis or Khasiyas. The great festivals in the former take place on the Shiurátri and in the latter at each *sankránt* and at the two harvests the important religious seasons of the non-Bráhmanical tribes.

Vishnu: Badrináth.

As Kedár is the principal and most sacred of all the Saiva temples in the Himálaya, so Badari or Badrináth[1] claims the name of '*paramasthán*,' or 'supreme place of pilgrimage,' for the Vaishnava sects. The story of Badari from the sacred books has been told elsewhere. The name itself is derived from the jujube-tree (*Zizyphus Jujuba*), which is thus referred to in the local legends :—When Sankara Achárya in his *digvijaya* travels visited the Mána valley, he arrived at the Nárada-kund and found there fifty different idols lying in the waters. These he took out one by one and when all had been rescued a voice from heaven came saying :—"These are the images for the Káliyug : establish them here." The Svámi accordingly placed them beneath a mighty tree which grew there and whose shade extended from Badrináth to Nandprayág, a distance of forty kos, and hence the name Adi-badri given to the sacred jujube of the hermitage.[2] The place selected for the restoration of the worship of Vishnu was at the foot of the Gandhamádana peak, one of the boundaries of Meru. Close to it was the *ashrama* or hermitage of Nar-Náráyana,[3] and in course of time temples were built in honour of this and other manifestations of Vishnu. The entire tract in the neighbourhood is known as Vaishnava-Kshetra and contains several hot-springs in which Agni resides by permission of Vishnu. At Badari itself, besides the great temple sacred to Vishnu there are several smaller ones dedicated to Lakshmi, Máta Murti and other Vaishnava forms and one to Mahádeo. Vaishnava-Kshetra

[1] Also known as Bishálapuri. [2] Explained elsewhere as intending only the extent of Vaishnava-kshetra. [3] So called in remembrance of Nara and Náráyana or Arjuna and Krishna, the Pylades and Orestes of the Indian myths : page 283, 388.

itself is subdivided into twelve subordinate *kshetras* or tracts called Tapta-kund, Nárada-kund, Brahm-kapáli, Kurma-dhára, Garur-sila, Nárada-sila, Márkandeya-sila, Varáhi-sila, Narsinh-sila, Basu-dhára tírtha, Sátyapatha-kund and Trikon-kund, all of which have legends connected with them which it would be tedious to enumerate. Vishnu is present in Badrináth as Nar-sinha, 'the man-lion incarnation,' but is supposed not only to contain the supreme spirit or Náráyana himself, but also Arjun as Nara and the '*panch devta*,' Nar-sinha, Varáha, Nárada, Garura and Márka. Nárada was a celebrated sage and chief of the Rishis and in the Mahábhárata is their spokesman when detailing the wonders they had witnessed whilst on a pilgrimage to the holy places in the Kumaon-Himálaya. His name frequently occurs in the local legends in connection with sacred pools and bathing places and in the Bhágavata Purána, he is mentioned as one of the partial incarnations of Vishnu. Marka was a priest of the Asuras who with Sanda went over to the gods and enabled Vishnu and the Suras to defeat their adversaries.[1] There are four other temples in connection with Badrináth and which together make up the Panch-badri, as the five temples erected by the five Pándavas to Siva make up the Panch-kedár. They are called :—Yog-badri, Dhyán-badri, Briddh-badri and Adi-badri and together complete the circle of pilgrimage prescribed for all devout Hindus, whether Vaishnavas or Saivas, but preferentially for the former. Badrináth is a favourite name for Náráyana or Vishnu, and as the popular forms of Siva have replicas all over India, so this form of Vishnu will be found in every province where his worship prevails. There are four others of the same name in Garhwál and four in Kumaon.[2] At the parent Badrináth, we have all the virtue of all observances at all other places of pilgrimage and according to the Kedár-khanda of the Skanda Purána, it possesses the Ganga which purifies from all sin : Ganesh the companion of Bhagwán and noticed hereafter as son of Siva and Párvati : Prahlád, the beloved disciple of Vishnu : Kuvera, the giver of riches to the three worlds : Nárada, who ensures the fruit of all good works, and Garura and Ghantakarn, of whom more hereafter. Brahma dwells at Brahm-kapál, where the *sráddha* is performed for the repose of the manes of ancestors. It was here, also, that Vishnu

[1] Muir, IV., 155.

[2] Sainana in Nayán ; Kurget in Sult; Dwára Hát and Garsír in Katyúr.

appeared to his followers in person, as the four-armed, crested and adorned with pearls and garlands and the faithful can yet see him on the peak of Náli-kántha, on the great *Kumbh*-day.

Pándukeswar.

Pándukeswar, so named in remembrance of the austerities observed there by the Pándavas, holds the temple of Yogbadri in which Vishnu is worshipped as Básdeo. We have seen that Básdeo is the name of the god worshipped in older times by the Kirátas, and that there are grounds for agreeing with Lassen that he is one of the non-Bráhmanical deities whose attributes were in later times transferred to Vishnu. The image of the god is here said to be of life-size made in part of gold and to have come down miraculously from the heaven of Indra. There are three other temples to Básdeo in Garhwál at which the usual Vaishnava festivals are held. The temple of Dhyán-badri is at Urgam, where also we have temples to Siva as

Dhyán-badri.

Briddh Kedár and Kalpeswar, both very old forms, whilst the name Urgam brings us back to the Uragas, a subordinate tribe of Nágas. The temple of

Briddh-badri.

Briddh Badri is at Animath, which also marks the scene of the devout exercises of Gautama Rishi, when the old man worn out by long and severe mortifications was visited by Vishnu himself. Here also lived Párvati as Aparna. In the Harivansa we have the following history of the daughters of Himáchal which differs from the ordinary one in assigning to him

Parn-khanda.

three daughters, among whom the Ganga is not enumerated. Mena was the mind-born (*mánasi-kanya*) daughter of the Pitris whose personified energy was the Mátris to whom there is a temple in Badrináth. She bore to Himáchal three daughters, Aparna, Ekaparna and Ekapátala. "These three performing very great austerity, such as could not be accomplished by gods or Dánavas, distressed (with alarm) both the stationary and the moving worlds. Ekaparna (or 'one leaf') fed upon one leaf. Ekapátala took only one *Pátala* (Bignonia) for her food. One (Aparna) took no sustenance, but her mother, distressed through maternal affection, forbade her, dissuading her with the words:—'*U ma*' ('O don't). The beautiful goddess, performing arduous austerities, having been thus addressed by her mother on that occasion, became known in the three worlds as Uma." Hence also

the name Parn-khanda, which has been changed in the local dialect to Pain-khanda as the name for the montane district, including the valleys of the Dhauli and Sarasvati or Vishnuganga and the Vaishnava-kshetra. The word '*parni*,' however, is a name of the *Butea frondosa* or common *dhák* or *palás* which does not grow in these regions.

Jyotirdhám.

In Jyotirdhám, 'the dwelling of the Jyotir ling,' and commonly known by the name Joshimath, there are several Vaishnava temples. The principal one is dedicated to the Nar Sinha incarnation of Vishnu and with it is connected the celebrated legend of the abandonment of Badrináth at some future time. It is said that one arm of this idol is year by year growing thinner, and that when it falls off, the base of the hills at Vishnuprayág, on the way to Badrináth, will give way and close up the road to the temple. To the east of Joshimath is Tapuban, on the left bank of the Dhauli river, and here is the temple of Bhavishya Badri or the Badri of the future to which the gods will go when Badrináth is closed to his worshippers as was revealed to Agastya Muni by Vishnu himself. The management of this temple also is in the hands of the priests of Badrináth. At Joshimath there are also temples to Básdeo, Garura and Bhagwati. The temple of Adbadri is at Subháni.

Bhavishya-badri.

Nar Sinh avatár.

The legend of the Nar-Sinh incarnation and Prahlád is related at great length in the Bhágavata and Vishnu Puránas.[1] It is there told how Prahlád, son of Hiranyakasipu, notwithstanding the displeasure of his father who was sovereign of the universe, remained attached to the worship of Vishnu. Even when condemned to death, he taught his companions the praises of Vishnu and was by them encouraged to persevere. When called into the presence of his father, Prahláda still appealed to him "from whom matter and soul originates, from whom all that moves or is unconscious proceeds, the adorable Vishnu." On hearing this confession of faith, Hiranyakasipu exclaimed: "kill the wretch; he is not fit to live who is a traitor to his friends, a burning brand to his own race." On this the Daityas innumerable took up arms and threw themselves upon Prahlád to destroy him. The prince calmly looked upon them and said:—"Daityas, as

[1] Wilson's, works, VII., 32-68.

truly as Vishnu is present in your weapons and in my body, so truly shall those weapons fail to harm me." And accordingly, although struck heavily and repeatedly by hundreds of Daityas, the prince felt not the least pain. The Nágas next tried to kill Prahlád, but were equally unsuccessful. Elephants were then brought forward and poison, but this last recoiled upon those who used it and destroyed them. Prahlád was then flung down from the battlements of a lofty fort and escaped unhurt. He also defeated the wiles of Sambara, priest of the Asuras, and every other influence brought to bear upon him, steadfast in his love for Hari, the undecaying and imperishable. In reward he was made one with Vishnu, but even then failed not to hymn Purushottama.[1] Hiranyakasipu then asked his son :—" if Vishnu be everywhere why is he not visible in this pillar," whereon Vishnu enraged beyond all restraint burst forth from the pillar in the hall where the people were seated and in a form not wholly man nor wholly lion fought with the Daitya king Hiranyakasipu and tore him to pieces. On the death of his father, Prahlád became sovereign of the Daityas and was blessed with numerous descendants. At the expiration of his authority, he was freed from the consequences of mortal merit or demerit and obtained, through meditation on the deity, final exemption from existence." He is now honored by all Vaishnavas, as the "*premi bhakt*," the beloved disciple of Bhagwán. This legend clearly refers to the opposition shown to the introduction of the worship of Vishnu amongst the non-Bráhmanical tribes. There are ten temples to the form Nara-Sinha in Garhwál and one at Almora in Kumaon.

Some century and a half ago the worship of Vishnu at Badrináth was conducted by Dándi Paramahansa fakírs from the Dakhin, but these gave way to Dakhini Brahmans of the Lanbúri caste from Kírat Malwár. There are always three or four aspirants for the office of Ráwal, as the chief priest is called, in attendance, one of whom usually takes the duty at Badrináth whilst the remainder reside at Joshimath. The service at Badrináth takes place from Baisákh to Kárttik. Brahmans from Deoprayág officiate at the Tapta-kund ; Kotiyál, Dándi and Hatwál Brahmans at Brahm-Kapál ; Dimri Brahmans at the temple of Lakshmi Devi and at the temple to Siva, Máliya Brahmans of Tangani. The attendant priests at Yog-badri

[1] Another name of Vishnu and like Básdeo probably borrowed from a favorite god of the mountain tribes : see Muir, IV., 297.

are Bhats from the Dakhin; at Dhyán-badri are Dimris and at Briddh-badri and Ad-badri are Dakhinis.[1] As a rule, Bairágis serve the other Vaishnava shrines in Garhwál and Kumaon.

Other Vaishnava temples.

Amongst the minor Vaishnava temples in Garhwál Triyugi Nárayan is the most celebrated. The temple is situated in the valley of the Jalmal, an affluent of the Mandákini, in Patti Maikhanda of Garhwál and marks the scene of the wedding of Mahádeo with Párvati, the daughter of Himáchal. There came Agni all radiant and Vishnu and the latter god left a portion of himself behind. There are hot springs here and four pools, Baitarani, &c., in which the pilgrims bathe. One of these pools is said to be full of snakes of a yellow colour which come out on the Nágpanchami to be worshipped. From its position on the pilgrim road from the Bhágirathi to the Mandákini there is always a fair attendance of worshippers during the season. There is a temple to the same form at Bágeswar in Kumaon. At Chandrapuri in Patti Talli Káliphát there is a temple dedicated to Vishnu as Murli Manohar, built by one Chandramani, Dangwál, of the family of the hereditary purohits of the Rajas of Garhwál and who also gave his name to the place. Another temple to the same form of Vishnu exists at Gulábkoti on the Alaknanda and was founded by Guláb Singh, Ráotela. There are other temples to this form at Bidyakoti and Dewalgarh. To the form Lakshmi-Nárayan, there are fifteen temples in Garhwál and three in Kumaon: to Nárayan there are seventeen temples in Garhwál and three in Kumaon. There are also temples to Mal Nárayan in Pangaraun; to Satya Nárayan, at Mánil in Náyan and to Nárayan Dyal, at Karkota in Sálam. The principal temples to Lakshmi-Nárayan are in Srinagar itself; the one known as Sankara Math was built by Sankara Dobhál in 1785 A.D. A Dobhál Brahman named Sivanandi built the temple to Nárayan at Sivanandi. There are old temples, also to this form, at Semli in Pindarpár, Ad-badri in Síli Chándpur, Náráyanbagr and Nandprayág. There are

[1] The following temples not included in the Panch-badri are managed by the Badrináth establishment: Nárayan at Nandprayág: and Maithána, served by Sati Brahmans Nárayan at Hát in Nágpur, served by Hatwál Brahmans; Náráyan at Náráyanbagr, served by Bairágis; Vishnu at Vishnuprayág, served by Bairágis; Básdeo and Garúr at Joshimath and Nar-Sinh at Dádmi, served by Dakhini priests and Nar-Sinh at Pákhi Bharwári, served by Dimris. In Kumaon, Badrináth at Garsar in Malla Katyúr and at Dwára is connected with the Garhwál temple.

temples to Ráma at Giwár, Srinagar and Kothar in Lohba and to Rámapáduk at Almora, Uliyagaon in Borárau and Rámjani in Udepur: to Beni Mádhava in Bágeswar and to Gol Gobind in Garhwál. The temple at Rámjani is supposed to mark the site of Rámá's hermitage: hence the name Banás applied to the forest in the neighbourhood from '*ban-bás*,' residing in a forest. The temple at Másí in Giwár stands on the site of a much older building as the remains still found there testify. There is no great Vaishnava establishment in Kumaon, the temples to Raghunáth and Siddh Nar Sinha at Almora existing only from the removal of the seat of Government from Champáwat to Almora about three hundred years ago. The Vaishnava temples at Bágeswar appear to be of considerable age, but now are of but very local importance. Dwára which owes its name to its being the representative in the Himálaya of Dwáraka, so celebrated in the history of the Páudavas, has several Vaishnava temples, chief of which is Badrináth, an offshoot of the great establishment.

Names of Vishnu.

Sanjaya, the charioteer of Dhritaráshtra, explains, in the Mahábhárata, several of the names of Vishnu. "From his greatness (*vrihatnát*) he is called Vishnu. From his silence (*maunát*), contemplation and abstraction do thou know him to be Mádhava. From his possessing the nature of all principles, he is Madhuhan and Madhusúdana. The word '*krishi*' denotes 'earth' and '*ná*' denotes 'cessation'; Vishnu from containing the nature of these things is Krishna, the Sáttvata. * * Inasmuch as he does not fall from or fail in existence (*sattva*), therefore from his existence he is Sáttvata and from his excellence (*arshabhát*) Vrishabhekshana." As he has no mortal parent he is Aja (unborn) and from self-restraint (*dama*) he is Dámodara. From the joy (*harsha*) he gives to those over whom he rules he is called Hrishíkesha. From his moving over the waters (*náránám*) he is called Náráyana[1]; from filling (*púranát*) and abiding (*sadanát*) he is known as Purushottama." Krishna elsewhere calls himself Dharmaja from his having been born as a part of Dharma and Munjakeshavat, or he who has hair like the *múnj* grass from the colour his hair became when attacked by the fiery trident of Rudra. He is also called Hari, Vaikuntha, Prishnigarbha, Suchisravas,

[1] In some places derived from his moving amongst men (*náránam*), but the reading adopted seems to be preferable (page 283).

Ghritáchi, Hansa, and he whose sign is Tárkshya (Garura). In one place full one thousand names of Vishnu are quoted and the names of Siva, Agni, Brahma and the other gods included amongst them as he is the other gods who are only parts of Vishnu through whom they live and move and have their being.

Saktis of the Himálaya.

We shall now turn to the forms of Sakti worshipped in the Kumaon-Himálaya and have to assign the first place to the Sakti of Siva, retaining the separation of the forms of Siva into those which follow Agni and those derived from Rudra, though doubtfully correct in fact. Still as in the male form there are three characters, so in the female form we may refer Nanda, Uma, Ambika, Párvati, Haimavati, &c., to the consort of Rudra and Dúrga, Jvala, &c., to the consort of Agni and Káli, Chandi, Chandika, &c., to Nirriti, the goddess of all evil and representative of the consort of Siva as 'lord of dæmons.'

Uma.

Uma is one of the earliest names of the consort of Siva, and in the first text in which the name occurs, the Talavakára or Kena Upanishad,[1] she is called Uma Haimavati. The other gods wished to assume the majesty by which Brahma had been victorious for them over the Asuras, so he manifested himself in a delusive shape to them and they knew him not. Agni, Váyu and Indra were deputed to examine whether "this being was worthy of adoration." Brahma simply placed a blade of grass on the ground which Agni tried to burn and Váyu tried to blow away, but neither of them was successful. Indra then met Uma, the daughter of Himavat, in the ether and asked her whether the form was worthy of adoration, and she distinctly declared that the being was Brahma, so that it was through Uma that even Indra knew Brahma. According to Sankara Achárya, who wrote a commentary on this Upanishad, it was Uma in the form of 'Vidya' or 'knowledge' that appeared to Indra, and according to Sáyana:—"Since Gauri, the daughter of Himavat, is the impersonation of divine knowledge, the word 'Uma,' which denotes Gauri, indicates divine knowledge." Hence in the Talavakára Upanishad the impersonation of divine knowledge is introduced in these words:—"He said to the very resplendent Uma

[1] Roer's translation published by As. Soc. Cal., page 83, with Weber's note also quoted in Muir, IV., 420.

Haimavati, the supreme spirit who is the object of this divine knowledge from his existing together with Uma (*Sa+uma*) is called Soma." From these considerations a connection between Uma as 'divine knowledge' and Saraswati, 'the divine word', might be supposed and even etymologically with the sacred omnific word '*om*,' but Weber points out that there are other characteristics which place the original signification of Uma in quite another light. Why is she called Haimavati? In another place we have seen[1] from an old text that the northern country in which Badari is expressly named was celebrated for the purity of its speech and that students travelled thither for study and on their return enjoyed great consideration on this account. Weber goes on to say that—

"It would have been quite natural if this state of things had not been confined to language, but had become extended to speculation also, and if the knowledge of the one, eternal Brahma, had been sooner attained in the peaceful valleys of the Himálaya than was possible for men living in Madhyadesa, where their minds were more occupied with the practical concerns of life. Such a view of Uma Haimavati appears to me, however, to be very hazardous. For, not to say that in our explanations of the ancient Indian deities we act wisely when we attach greater importance to the physical than to the speculative element—we are by no means certain that Uma actually does signify divine knowledge (*brahma vidya*); and, moreover, her subsequent position as Rudra's wife and so Siva's would thus be quite inexplicable. Now there is among the epithets of this latter goddess a similar one, *viz.*, Párvati, which would lead us in interpreting the word Haimavati to place the emphasis not in the Haimavat, but upon the mountain (*parvata*), and with this I might connect the epithets of Rudra which we have learned from the Satarudriya Girisa, &c, in which we recognise the germ of the conception of Siva's dwelling in Kailasa. He is the tempest which rages in the mountains, and his wife is therefore properly called Párvati Haimavati; 'the mountaineer,' 'the daughter of Himavat.' At the same time it is not clear what we have to understand by his wife, and further she is, perhaps, originally not his wife, but his sister, for Uma and Ambika are at a later period evidently identical and Ambika is Rudra's sister. Besides this identification of Uma with Ambika leads to a new etymology of the former. For as Ambika 'mother' appears to be merely an euphemistic and flattering epithet, employed to propitiate the cruel goddess, in the same way it appears that we must derive Uma from the root '*u*' '*av*' 'to protect;' It is true that a final vowel before '*ma*' commonly takes '*guna*' or is lengthened, but the words '*sima*' and '*hima*' shew that this is not necessary, and the name of Rama is perhaps (unless we derive it from '*ram*') a perfectly analogous formation. It certainly remains a mystery how we are to conceive the cruel wife of Rudra coming forward here in the Kena Upanishad as the mediatrix between the supreme Brahmá and Indra, for in that supposition this Upanishad would have to be referred to a

[1] Pages 273, 299.

period when her husband, Rudra, was regarded as the highest god, the Isvara, and thus also as Brahma, *i.e.*, it would belong to the period of some Saiva sect. But since this remains questionable and improbable, we must first of all hold to the view that the conception entertained by the commentators of Uma as representing 'divine knowledge' rests solely upon this passage of the Kena Upanishad, unless indeed the original identity of Uma with Sarasvati, which in a previous note was regarded as possible, is here again visible."

The principal temple to Uma is that in Karnprayág at the junction of the Pindar and Alaknanda which is locally said to have been rebuilt by Sankara Achárya, the commentator on the passages above quoted.

Nandá.

It is, however, as Nandá that the Rudrá form of the Sakti is most popular in the Kumaon Himálaya, where she is worthily represented by the lofty peak of Nandá Devi, the highest in the province. Here she is one with Párvati, the daughter of Himáchal, and has many temples devoted to her exclusive worship. Those at Krúr in Malli Dasoli and at Nanora and Hindoli in parganah Talli Dasoli are specially celebrated amongst the Garhwális, who further give the name Nandákini to the river which flows from the three-peaked Trisúl, the companion of Nandá Devi, and the name Nandák to the tract near its source. Krúr is situated on the Bhadra-gádh, near the Mahádeo pool, on the right bank of the Nandákini and Hindoli lower down in the same valley. Both these temples are favourite places of worship with the Parbatiyas, as the people of Chándpur, Lohba, Nágpur, and the northern pattis are called by the inhabitants of lower Garhwál. There are other well-known temples to this goddess at Semli Míng, and Talli Dhúra in the Pindar Pattis at Nauti in Taili Chándpur and at Gair in Lohba. The worshippers at all of them unite to celebrate the marriage of Siva and Párvati on the *nandáshtami*. A procession is formed at Nauti which accompanied by the goddess in her palanquin (*doli*) proceeds to the Baiduni-kund at the foot of the Trisúl peak, where she is worshipped with great reverence and rejoicing. A great festival, also, takes place every twelfth year, when accompanied by her attendant Látu, who also has a temple at Nauli in parganah Dasauli, the goddess is carried into the snows as far as the people can go beyond the Baiduni-kund and there worshipped in the form of two great stones (*sila*) glittering with mica and strongly

reflecting the rays of the sun. The local legend says that on these great occasions, a four-horned goat is invariably born in parganah Chándpur and dedicated to the goddess, accompanies the pilgrims. When unloosed on the mountain, the sacred goat suddenly disappears and as suddenly returns without its head and thus furnishes consecrated food for the party. Milk, too, is offered to the goddess and then partaken of by her worshippers; whilst on the great mountain, no one is allowed to cook food, gather grass, cut wood or sing aloud, as all these acts are said to cause a heavy fall of snow or to bring some calamity on the party. There are temples to Nanda at Almora, at Ranchúla in Katyúr and at Bhagar in Malla Dánpur, in Kumaun. Another popular local name for Nanda amongst the lower classes is Upharni (u-parni), under which name she is represented at Nauti and elsewhere where no temples are erected to her beyond a heap of stones on a peak. At Nauti she has a regular establishment of priests, called from the place Nautyáls and who were, in former times, the favourite purohits of some of the petty Rajas of Garhwál. There is a local Upapuráṇa devoted to the worship of Nanda and a description of the places sacred to her in the Kumaun Himálaya which I regret that I have been unable to procure.

Ambika, Gauri, &c.

Sáyana explains Ambika as one with Párvati and that her body is designated by the word Uma to Uma's husband (Siva). In the earlier literature, she is the sister and subsequently the wife of Rudra.[1] In the Taittiríya-Bráhmana it is said :—"This is thy portion, Rudra, with thy sister Ambika." According to the commentator, Ambika represents autumn which kills by producing disease. She is occasionally mentioned in Hindu fiction[2] and has a temple at Almora and her consort one as Ambikeswar at Tákula in Malla Syúnara. Because Siva has a share with her, a female (*stri*), in the sacrifice, he is called Tryambaka[3] (*i.e.*, Stryambaka). Uma as Gauri has well-known temples at Dewalgarh, Tapuban and Gaurigaon (in Patti Maikhanda). She is here no more than another form of Nanda or Párvati, though more inclined to the terrible than to the milder form of Rudra's Sakti. Amongst the doubtful forms, reference may be

[1] Muir, IV., 321, 422. [2] Wilson, III., 26'. [3] Násik is popularly known as Tryambak Násik, from the temple of Tryambakanáth close by.

made to Mallika who has temples at Gaitháua in Mahar and Mála in Borárau and who is represented as the consort of Mallikárjun of Askot and Pushti,[1] one of the older names of the Sakti who has a great temple to her honour in the Jageswar grant.

Durga.

The original idea of Durga makes her belong to the Agni form of Siva, for we find her addressed in the Taittiríya Aranyaka as she "who is of the colour of fire, daughter of the sun," and Weber connects her name with the fire itself which delivers from all difficulties (*durga*) and becomes a protecting fortress (*durga*). He writes:—"If at a later time, Durga decidedly appears to have taken the place of the evil goddess Nirriti, this is no proof that it was so from the beginning, but only shows that the original signification had been lost: which is in so far quite natural as the consort of Siva bore a terrific form both from her connection with Rudra and also with Agni." Here she is, however, one of the forms to which bloody sacrifices are made and evidently the representative of the dæmon Sakti. In the hymn to Durga by Arjuna already noticed,[2] she is addressed thus:—"Reverence be to thee, Siddhasenáni (leader of the Siddhas), the noble, the dweller on Mandara, Kumári, Káli, Kapáli, Kapilá, Krishnapingalá. Reverence to thee, Bhadrakáli; reverence to thee, Mahákáli; reverence to thee, Chanda, Chandi; reverence to thee, Tárini, Varavarnini, fortunate Kátyáyini, Karáli, Vijaya, Jaya who bearest a peacock's tail for thy banner, adorned with various jewels, armed with many spears, wielding sword and shield, younger sister of the chief of cowherds (Krishna), eldest, born in the family of the cowherd Nanda, delighting always in Mahisha's blood, Kausiki, wearing yellow garments, loud-laughing, wolf-mouthed; reverence to thee, thou delighter in battle, O Uma Sákambhari, thou white one (*sveta*), thou black one (*krishna*), destroyer of Kaitabha, &c." Here we have evidence of the complex origin of her worship and an attempt by the Vaishnavas to graft her on to their system. In the Hari-vansa, it is related how Vishnu descended to Pátála and persuaded Nidra Kálarupini[3] to be born as the ninth child of Yasoda when he was born as Krishna in order to defeat the designs of Kansa. Hence the Vaishnava epithets in the hymn connecting her with Krishna and her worship at Srinagar (Kotiya) as Kans-

[1] 'Fatness.' [2] Muir, IV., 432. [3] 'Sleep in the form of time.'

mardini.[1] In the same work she is called the sister of Yáma, the god of death, and was perhaps his Sakti also as he was a form of Agni, older than Siva. She is also said to be worshipped by the savage tribes of Savaras, Varvaras and Pulindas, to be fond of wine and flesh and one with Sura-devi, the goddess of wine. In the Márkandeya Purána she is Mahámáya ('the great illusion') and Yoganidra ('the sleep of meditation') who saved Brahma when about to be destroyed by the demons Madhu and Kaitabha, so that Brahma says :—"Since thou hast caused Vishnu and me (Brahma) and Isána (Siva) to become incorporate, who has the power to praise thee?" Thus, in the later works, she has been raised to the highest place in the pantheon. As Durga, she has temples at Phegu in Kálipháṭ, Deuthán in Bichhla Nágpur, Bhawan in Talla Udepur, Dunagiri, Dhurkadánda in Sálam and Khola in Lákhanpur.

Mahishamardini.

In the extract from Arjuna's hymn given in the preceding paragraph, Durga is said to be "delighting always in Mahisha's blood" and hence her name Mahishamardini or 'crusher of Mahisha.' There are temples to this form at Triyugi Jákh in Patti Talli Kálipháṭ and at Srinagar and Dewalgarh in southern Garhwál. She is also called Mahisha-ghni or 'slayer of Mahisha,' Mahisha-mathani and Mahisha-sudani. The Asura Mahisha was a demon with a buffalo's head who fought against the gods and was defeated by Durga. He gave his name to the province of Mysore (Mahisur, Mahisha-asura) which would indicate a southern origin for the legend, but the local etymologists also derive the name of the Patti Maikhanda in which the temple of Triyugi-Jákh is situated from the same source and say that the contest took place there. In the Pádma Purána, Kshemankari Devi, another form of Durga, is wooed by Mahishásura who attempts to carry her off by force and is slain.[2] There is a temple to the same goddess at Kálbangwára or Kálikasthan close to Triyugi-Jákh which marks the scene of her victory over the Daitya Raktavíja. The local legend relates how this enemy of all that was good interrupted the worship of Indra and the other gods who appealed

Raktavíja.

[1] 'Crusher of Kans.' [2] For an illustration of the combat, see As. Res., VIII., 76; also Wilson, III, 29: the local dialect makes the name Mahikh, like Ukha from Usha. The goddess is represented as of a yellow colour with six or ten arms and seated on a lion.

to the consort of Siva for aid. She attacked the demon with the Shástras, but such was their inherent virtue and so great was the power of the demon that from every drop of his blood that was shed a fresh army of Daityas arose. The combat was prolonged on this account, but in the end the goddess was victorious and the earth was relieved of its burden and the gods of their remorseless enemy. In remembrance of this victory, the gods erected a temple to their deliverer and established her worship. For many years this was a favourite place of pilgrimage until the unbelievers came who, in their turn, fell before the word of might spoken by Sankara Achárya. He rebuilt the temple and again proclaimed the worship of the goddess and her band of Joginis[1] and placed the service of the temple on the Kedárnáth establishment.

Tripura-sundari.

As Tripura-sundari or 'ornament of Tripura,' Durga has temples at Almora and Bininág in Patti Baraun. Tripura-bhairavi or Tripurá simply is her name as consort of Siva, who is Tripura-dáha, 'the destroyer of Tripura.' Tripura here represents the three aerial cities of the Asuras, one of iron, one of silver, and one of gold, which Indra with all his weapons could not destroy. In the Mahábhárata,[2] Yuddhishthira tells Krishna how Rudra destroyed the three cities with a three-jointed barbed arrow of which Vishnu was the shaft; Agni, the barb; Yama, the feather; the Vedas, the bow and the sacred text (*gáyatri*), the bow-string. Another of the Agni forms is Dipa, under which name the Sakti of Siva is worshipped on the Dhansyáli peak in Patti Khátli, on the Tilkani peak in Patti Sábali, at Gawáni in Patti Kimgadigár and at Khadalgaon in Chaundkot in Kumaon. As Jwálpa from *jwála*, 'a flame,' she is one with the great form Jwála-mukhi and has temples at Jwálpa-dera in Kapholsyún and at Jalai in Kálipháṭ. Durga is called Bhrámari because she took the form of a bee when contending with Mahisha, and under this name there is a temple largely endowed at Ranchúla Kot in Katyúr. As Jaya (victory) under the form Jayakari, she has a temple at Sailáchal in Bel and as Jayanti she is worshipped at Jayatkot in Borárau. It is told in the Mátsya-Puráṇa

[1] These Joginis are said to wander about the country causing disease to the people and blight to their crops, if the oblations at the temple are of little value or the worship of their mistress is neglected. They live amongst the boulders near the temple, whilst the goddess is represented by a simple mass shining with mica. [2] Muir, IV., 203: Tripura represents the modern Tipperah.

how Indra endeavoured to distract the attention of Sukra, the chief of the Asuras who was engaged in great austerities for the purpose of propitiating Siva. With this object in view, Jayanti, the beautiful daughter of Indra, was sent to tempt the sage, and Sukra overcome by her blandishments lived with her for ten years invisible to every one. Then the gods, in the absense of the Asura leader, sent Vrihaspati to assume his form and were thus able to defeat their enemies. As Akásabhájini, the Sakti of Sivâ has a temple at Mar in Saun, and this form may probably be connected with the Bauddha form[1] Akáṣayogini of the Swábhávika system of Nepál, "which resembles the Yoginis and Yakshinis of the Tantrika system in their terrific forms and malignant dispositions."

Káli.

To the Nirriti form of the Saiva Sakti as Káli, there are numerous temples in Kumaon and Garhwál without including those in which she is worshipped simply as Devi, "the goddess *par excellence*" in conjunction with Bhairava. As Bhadra Káli she has a temple at Bhadoi in Kamsyár; as Dhaula Káli, at Naini in Lakhanpur and as Mahá Káli, at Devipuri in Kota and at Dárún. So popular is her worship that wherever a great miracle-working image of this goddess appears, she is carried under the local name to other places, so we have the Kot Kangra Devi set up in a dozen villages remote from the original temple, but bearing the same name. These local names are very common in Kumaon: thus there are a dozen temples to the Calcutta Káli in Kumaon, chief of which is the Purnagiri temple near Barmdeo in Tallades. Here on a peak above the Káli river, there is a group of temples in her honour supported by a large establishment which derives its income from the temple lands and the offerings made by visitors during the season of pilgrimage which lasts from November to April. The next in importance is the temple at Hát in Gangoli where the goddess is worshipped as Mahákáli and is served by Rauli Brahmans. In Askot she is worshipped on the banks of the river, where a fair is held on the fourteenth of the light half of Pús. Here there is a holy well used for divination as to the prospects of the harvest. If the spring, in a given time, fills the brass vessel in which the water is caught, to the brim, then there will be a good season, if only

[1] Wilson, II., 21.

half full, scarcity may be expected, and if only a little water comes, then a drought may be looked for. Every third year, the local magnate, the Rájbár, proceeds with great pomp and circumstance to worship the goddess. As Ulka, the flame or demon-faced goddess, she has temples at Naula and Chaun in Patti Nayán at Thapaliya in Chhakháta and at Almora. At the last-named place, an assembly is held in her honour on the tenth of Asoj naurátri and the town is illuminated from the 13th to the 15th of Kárttik. Riotous living, debauchery and gambling seem to be the characteristics of the worship of this form of the goddess and the observances at this season at Almora form no exception to the rule. As Ugra or Ugyári, 'the terrible goddess,' she has a temple at Dhudiya in Giwár and as Syáma, 'the dark,' one in Uchyúr. Vrinda, to which a temple is dedicated and endowed in Tikhon, is one with the goddess who gives her name to Vrindávana or Bindrában in Mathura. She is a daughter of Kedára and is also made one with Rádha, the mistress of Krishna, in the *Brahma-Vaivartta* Purána, a curious blending of the teaching of the two sects. In the Pádma Purána[1] it is related how Vishnu was fascinated with the beauty of Vrinda, wife of Jalandhara, and to redeem him from her enthralment, the gods had recourse to Lakshmi, Swadha and Gauri, the three Saktis: hence the mixed character of the legend. Yákshani at Almora is a somewhat doubtful form, as is also Naini to which there are temples at Kaulág in Katyúr, Bajwai and Sankot in Pindarwár and Naini Tál. Lalita Devi has a temple at Nala Káli in Kálipháṭ and receives animal sacrifices and Bhímá has one at Airi-ka-tánda in Sálam.

Chámunda, Chandika.

Chámunda and Chandika represent Káli in her most terrible forms. The first has temples at Biraun in Kálipháṭ, at Dungar in Bichhla Nágpur and at Khera in Patti Udepur. The Mundan-deota is also one of her forms and she owes her name to her having sprung from the forehead of Durga in order to destroy the Daityas Chanda and Munda. Having slain the demons she brought their heads to Durga, who told her that having slain Chanda and Munda, she should, henceforth, be known on earth as Chámunda. She is termed Káli from her black colour and Karáli from her hideous face, but the latter name is not used in Kumaun. In the *Málati*

[1] Wilson, III., 68, 115.

and *Mádhava*, her place of worship is near the public cemetery[1] and she is thus addressed by her priest Aghoraghanta :—

"Hail! hail! Chámunda, mighty goddess, hail!
I glorify thy sport, when in the dance[2]
That fills the court of Siva with delight,
Thy foot descending spurns the earthly globe;
* * * * *
From the torn orb,
The trickling nectar falls, and every skull
That gems thy necklace laughs with horrid life.
Attendant spirits tremble and applaud;
The mountain falls before the powerful arms,
Around whose length the sable serpents twine
Their swelling forms, and knit terrific bands,
While from the hood expanded frequent flash
Envenomed flames.
As rolls thy awful head,
The lowering eye that glows amidst thy brow
A fiery circle designates, that wraps
The spheres within its terrible circumference:
Whilst by the banner on thy dreadful staff,
High waved, the stars are scattered from their orbits.
The three-eyed God exults in the embrace
Of his fair spouse, as Gauri sinks appalled
By the distracting cries of countless fiends
Who shout thy praise. Oh, may such dance afford
Whate'er we need,—whate'er may yield us happiness."

According to some Chámunda sprang from Párvati and others say that the mild portion of Párvati issued from her side, leaving the wrathful portion whence arose Káli, Syáma, Durga, Chámunda and all the dark forms.

Chandika.

Chandika or Chandi has nine temples in Garhwál and two in Kumaon, at Kamaltiya in Gangoli and at Jageswar. She is also worshipped as Anjani Devi at Nildhára in Dehra Dún where there is a temple built by Raja Guláb Singh of Jammu. She differs in no respect from Chámunda and has the usual decoration of a necklace of skulls and the crescent-moon on her forehead. The moon being chosen, doubtless, as the reservoir of the essence of immortality (*amrita*) and the source of light for those who seek for incantations and

[1] From Wilson's translation, Works, XII., 58. [2] The dance which Siva instituted for the amusement of his court in which Nandi was the musician and Ganesha with his elephant's head and Kárttikeya mounted on a peacock took part.

spells. The *Chandi Pátha* or *Durga-mahatmya* of the Márkandeya-Purána is read at the great festival held in her honor and so well known as the Durga Puja.[1] This is the form of Durga referred to in the Harivansa as an object of worship to the barbarous Savaras. In several of the stories recorded in the *Vrihat-katha* she is described as pleased with human sacrifices, and, in one, these Savaras[2] are represented as about to offer a child to the goddess. In most of these legends she is alluded to as the deity of barbarous forest and mountain tribes and as unacceptable to the more orthodox. She is usually worshipped on every *sankránt*.

Sítala.

Sítala, the goddess of small-pox, has temples at Almora, Srinagar, Jageswar, Náti in Bel, Dola in Mahar, at the Siyál De (Sítala Devi) tank in Dwára and at Ajpur in Dehra Dun. She is represented as a woman dressed in yellow, with an infant in her arms and is one with the Háriti of the Bauddha system in Nepál. In most places the officiating priests belong to the Chamár or currier caste who go through a rude form of Sákti ceremonial. The offerings are red-powder, rice, flowers, sweetmeats and coin. Amongst the

Local forms.

female forms bearing local names Hariyáli at Jasoli in Patti Dhanpur in Garhwál is most prominent. One image of the goddess is on the peak above Jasoli and the other in the temple near the village. The first is said to have fallen from heaven and is the object of an annual assembly held on the first day of the light half of Kárttik, when the Jasoli image also is brought in a *doli* to do honour to the feast. The power of the goddess there is shown by her favour towards her worshippers in enabling them to pass up the mountain by a most difficult path without trouble, in protecting them from the tigers which abound in the neighbouring forests, and in supplying them with water which in appearance should only suffice for one person, but miraculously serves the wants of thousands. The worship of the goddess in Jasoli itself continues all the year round. The temples at Siloti and Khairola in Chhakháta are dedicated to Chandraghanta, one of the nine names of Durga. Whatever special legends attached to Akhiltárini at Khilpati,

[1] Wilson, III., 265, 353: II., 143, 165. [2] Non-Brahmanical tribes of the Panjáb.

Khimál at Hát, Uparde at Amel in Kosiyan, Santaura near the confluence of the Tons and Jumna, and Kamádki at Naugaon in Maudársyún are now forgotten and the name alone survives as a form of Káli or[1] Devi.

The Sáktis of eight of the deities are known also collectively as Mátris, and in this form have a temple dedicated to them at Badrináth. The following extract from the *Devimahátmya* of the *Márkandeya-purána*[2] describes the assembling of the Mátris to combat the demons :—

The Mátris.

"The energy of each god, exactly like him, with the same form, the same decoration, and the same vehicle came to fight against the demons. The Sakti of Brahma, girt with a white cord and bearing a hollow gourd, arrived on a car yoked with swans; her title is Brahmáni. Máheswari came riding on a bull, and bearing a trident with a vast serpent for a ring and a crescent for a gem. Kaumári bearing a lance in her hand, and riding on a peacock, being Ambika in the form of Kárttikeya, came to make war on the children of Diti. The Sakti named Vaishnavi also arrived sitting on an eagle, and bearing a conch, a discus, a club, a bow and a sword in her several hands. The energy of Hari who assumed the unrivalled form of the holy boar, likewise came there assuming the body of Váráhi. Nárasinhi too arrived there embodied in a form precisely similar to that of Nar Sinha with an erect mane reaching to the host of stars. Aindri came bearing the thunderbolt in her hand and riding on the king of elephants (Airávati) and in every respect like Indra, with a hundred eyes. Lastly, came the dreadful energy named Chandika who sprung from the body of Devi, horrible howling like a hundred jackals : she surnamed Aparájita, the unconquered goddess, thus addressed Isána whose head is encircled with his dusky braided locks. Thus did the wrathful host of Mátris slay the demons." Some authorities omit Chandika and insert Kauveri, the energy of Kuvera, the deformed god of wealth. Neither Brahmáni nor Máheswari have separate temples in these districts. Kaumári as Ambika has already been noticed. Vaishnavi has a temple at Naikrini in Seti and is one with Náráyani, who has a

[1] The following names also occur :—Harnanda, Nagrásuni in Dhanpur, Uphráyani at Nauti, Sanyásini at Kamer in Talla Nágpur, Jhanankár at Khola in Sironsyún and Putresvari, one of the nine Putrikas at Almora. [2] Colebrooke, As. Res., VIII., 84.

temple at Siloti in Chhakháta. Várâhi has a celebrated temple at Devi Dhúra and another at Basan in Patti Sálam. Nára-sinhi has a temple near Almora, endowed by Debi Chand. Aindri is unknown and Chandika or Chámunda has already been noticed. The *Uttara Kalpa* of the *Márkandeya Purána* thus describes the *Váhans* or vehicles of the Mátris: "Chámunda standing on a corpse; Várâhi sitting on a buffalo; Aindri mounted on an elephant; Vaishnavi borne by an eagle, Máheswari riding on a bull, Kumári conveyed by a peacock; Bráhmi carried by a swan and Aparájita revered by the universe, are all Mátris endowed with every faculty." Figures of each of these goddesses are drawn on wood and worshipped at the *Mátri-puja* (*q. v.*) The worship of the Saiva Sakti forms is in the hands of Kánphata Jogis or of Khasiyas. The festivals take place usually at the two harvest seasons or on every *sankránt* in the greater temples. The Chait and Asoj *naurátris* are also observed in some temples.

Vaishnavi Saktis.

Neither here nor in any other part of Upper India is the separate worship of the Vaishnavi Sakti common. Lakshmi has a separate temple at Badrináth, but, as a rule, is worshiped with Vishnu as Lakshmi Náráyan. Síta has one temple at Sítakoti and another at Cháin in Urgam which belongs to the Badrináth foundation and is served by Dimri Brahmans, the same caste that officiates at the Lakshmi temple in Badrináth. Bhagwati, a doubtful form, has temples at Joshimath, Bhagoti in Sirguru, Bhagotaliya in Dhaundyálsyún and Naini in Lakhanpur. These are the only Sakti forms of Vishnu that possess separate temples in this portion of the Himálaya and they are all served by Bairágis.

Kárttikeya.

Kárttikeya or Skanda or Guha, one of the sons of Siva and Párvati, is worshipped by the villagers on the Katar Syám peak at Popta and at Kándi and between Sonri and Agar in Patti Talli Kálipháṭ in the month of Sáwan. In the Rámáyana, Kárttikeya is the son of the Ganga river by Agni and owes his name to his having been brought up amongst the Krittikás in the country about Kailás. He was the general of the gods and as afterwards Agni was identified with Rudra or Siva and Ganga with her sister Párvati, he is also called the child of Siva and Párvati. The second account in the

Mahábhárata by which he is made the offspring of Agni and the six wives of the Rishis has been noticed elsewhere.[1] To this latter legend is due his appearance with six heads and one body. He is well known in the form of a man riding on a peacock and holding in one hand a bow and in another an arrow and has given his name to Kárttikeyapura, the old capital of the Katyúris.

Ganesha.

Ganesha, another of the sons of Siva, and the object of worship of one of the recognised sects, has separate temples at Almora, Sail in Talla Syúnara, Srinagar, Ganaikot in Painkhanda and at Gauri-kund, all in Garhwál. His image also frequently occurs in both Vaishnava and Saiva temples. The Ganesha Khanda of the Brahma-Vaivartta Purána[2] is devoted to his history and relates how Párvati desiring a son was told by her husband to propitiate Vishnu, who allowed a portion of himself (Krishna) to be born as Ganesha. When the gods came to congratulate Párvati, Sani or Saturn, who had been doomed to destroy everything he looked upon, turned his gaze away, but, on being permitted by Párvati, took a peep at Ganesha, on which the child's head was severed from its body and "flew away to the heaven of Krishna where it reunited with the substance of him of whom it was a part." Párvati was inconsolable until Vishnu appeared and placed an elephant's head instead of the lost one and hence Ganesha is always represented with an elephant's head. Another legend is introduced to account for the loss of one tusk in this wise:—Parasuráma, who was a favourite disciple of Siva, came to the Himálaya to see his master, but was denied entrance by Ganesha, on which a quarrel arose. Ganesha had at first the advantage and seizing Parasuráma by his trunk, shook him so that he fell senseless. The hero when he recovered hurled the axe of Siva at Ganesha, who recognizing his father's weapon, simply received it on one tusk which it immediately severed. The followers of Ganesha though reckoned as a separate sect and actually existing as such in Kumaon are of no importance. The god himself is reverenced by all Hindus and no work is undertaken without invoking his aid. In all modern Hindu

[1] See further Muir, IV., 349, 365.

[2] Wilson, III., 103, and analysis of Ganesha Purana in J. R. A. S., VIII., 319.

books, the common beginning is "*Om, Ganeshâye om*," 'Hail, salutation to Ganesha', and similarly on setting out on a journey or commencing any work he is made the subject of special supplication for a prosperous ending.

Súrya or Aditya.

The Sauras or worshippers of Súrya or Aditya, the sun, are also represented in Kumaon. There are temples to the sun as Aditya, at Belár in Bel, at Adityaćyau in Mahar, at Ramak in Káli Kumaon, at Naini in Lakhanpur and at Jageswar: to Barâditya, at Katármal near Almora; to Bhaumâditya, at Pábhain in Bel and to Súrya Nárâyan at Joshimath. The great festivals are held on Sundays in Pús and when an eclipse occurs. The principal observances are the eating of a meal without salt on each *sankránt* and eating meals on other days only after the sun has risen. The *tilaka* or frontal mark is made with red sandars. The principal seat of the regular Saura priests is in Oudh.

Hanumán.

The monkey-god, Hanumán, so popular with many divisions of the Vaishnavas, has temples devoted to his sole worship at Almora, Srinagar (two), Amilagár in Painkhanda, the old fort on Dwárikhál in Langúr and Bethra in Patti Karákot served by Bairágis. His story is so well known from the Rámáyana that there is no need to repeat it here. The special priests (Khákis) of Hanumán are connected with the temple at Hanumángarhi, in Oudh.

Garur.

Garur, the vehicle of Vishnu, has temples to his honour in Srinagar, Joshimath and Pakhi (Painkhanda), besides sharing with Hanumán in the worship of Vishnu at all the other Vaishnava temples. He is the wonder-working bird common to the fables of all nations, the rukh of "the Arabian Nights," the Eorosh of Zend, the Simurgh of the Persians, the Kimi of the Japanese, the Chinese dragon and the Griffin of chivalry. In the Vishnu Purána, he is made the son of Kasyapa by Vinata or Suparna and is king of the feathered tribes and the remorseless enemy of the serpent race (Nágas). Kasyapa had by Kadru, another of his wives, 'one thousand powerful, many-headed serpents, of immeasurable might, subject to Garur,'[1] but Kadru and Vinata quarrelled together regarding the colour of the horse that was produced at the churning of

[1] Wilson, VII., 73.

the ocean and ever afterwards Garur remained a determined enemy of the Nága race. Garur is also called Tárkshya from Tárksha, a synonym of Kasyapa, Vainateya or Vináyak from his mother, Nágantaka, and Pannaga-kshana, from his enmity to the snake race. His worship is conducted by Bairágis.

Dattátreya.

Amongst the objects of worship we must also include the deified mortal Dattátreya. There is a temple to his separate worship at Dewalgarh in Garhwál and his image is also reverenced at Dwára and Jageswar. This sage was the son of Atri by Anasúya and one of three sons born in this world in answer to religious austerities and prayer to the three gods.[1] He is reverenced by the Vaishnavas as a partial manifestation of Vishnu himself and by the Saivas as a distinguished authority on the Yoga philosophy. He is served by Dásnámi Gosáins of the Puri section in Garhwál. Bhadráj near Mussooree has a temple sacred to Balbhadra served by Bairági ascetics.

Parásara.

Parásara Rishi has a temple in Parkandi and in Nigan in Khat Seli of Jaunsár. According to the Mahábhárata, Sakti, the son of the sage Vasishtha, was one day walking through the forests when he was met by Raja Kalmáshapáda, who ordered Sakti to get out of his way as the path was too narrow for both, but the sage refused, whereupon the prince struck him with his whip and drove him into the forest. Sakti forthwith cursed the Raja to be born again as a man-eating Rákshasa, which accordingly took place, but Sakti and all his brethren were the first victims of the Rákshasa. Adrishyanti, wife of Sakti, brought fourth a son called Parásara, who when he grew to man's estate desired to perform a great sacrifice by which he might exterminate the race of Rákshasas, but was dissuaded therefrom by the assembled Rishis. Parásara then scattered the fire of the sacrifice over the northern face of the Himálaya, where it still blazes forth at the phases of the moon. Parásara is, however, better known as the narrator and reputed author of the Vishnu Purána. The story as given above is also told in the Linga Purána with the emendation that Parásara is said to have been propitiating Mahádeo when he ceased from his sacrifice.[2]

[1] The other two were Soma and Durvásas. Wilson, VI., 154. [2] See, further, Wilson, VIII, 306.

Mándháta.

Raja Mándháta or Mándhátri, a partial incarnation of Vishnu, has a temple at Ukhimath and is also worshipped at Jageswar. Mándhátri, according to the Vishnu Purána,[1] was born of Yuvanáswa, a prince of the solar line, of his own body and when he appeared, the Munis asked who shall be his nurse as he has no mother. Indra said :—'He shall have me for his nurse' (*mám ayamdhásyati*) and hence the boy was called Mándhátri and suckled by the finger of Indra, he grew up to be a great monarch. According to the Brahma and Váyu Puránas Gauri was mother of Mándhátri and this is in accordance with the local legend and hence his name Gaurika and his association with that goddess in the popular worship. The story of the marriage of the fifty daughters of Mándhátri to the old ascetic Saubhari, is also known in Garhwál and told in connection with the Gauri kund.

Kapila.

Kapila Muni, the founder of the great Sánkhya school of philosophy, has a temple to his praise in Srinagar whilst there are four temples to Siva as Kapileswar in different places.

Agastya Muni.

There is a temple to Agastya at Banyái in Patti Talli Kálipháṭ, better known as 'Agastmuni. Agastya is celebrated in the Rámáyana[2] as the sage of the Dándaka forests and Vindhya hills and husband of the marvellous Lopámudra. The Muni was once allowed to see his ancestors in torments and was told by them that the only way to save them was by his begetting a son. Agastya by the force of his piety made a girl adorned with all the most beautiful parts of the wild animals of the forest and caused her to be born as daughter of the Raja of Vidarbha. She was called Lopámudra from loss (*lopa*) in her superior charms whilst possessing beauties (*mudra*) of form such as the eyes of deer and the like. Agastya eventually married her and retired to his hermitage, where he received Ráma and gave him the great weapons. The story of the jealousy between Vindhya and Meru or the Himálaya is thus related by the priests of Agastya at Banyái. In former times, Vindhyáchal complained to the assembled gods that Meru had grown so large that with much difficulty the sun was able to reach Bhárata-varsha, and that there appeared to be no reason why

[1] *Ibid.*, 265. [2] See Wheeler's History of India, II., 252.

she also should not increase and grow in influence like the Himálaya, for she was tired of hearing the praises of her rival. The gods thereon requested Agastya to become the spiritual preceptor of Vindhyáchal and decide this question. The Muni approached Vindhyáchal, who bowed at his approach and remained prostrate while he addressed her and told her to remain so and take no further steps to advance her claim to equality with the Kumaon Himálaya until he had himself returned from visiting Kedár. When Agastya arrived in Kumaon, however, he was so delighted with the country that he never returned and hence the verse :—

"*Na muni punar áyati : na chásau vardhate giri.*"

meaning that neither does the Muni return nor does the mountain increase and incidentally spoken of the results of an unsuccessful conference. This legend contains the popular explanation of the difference in height between the Himálaya and the Vindhyas. Special services are held on the Bikh *sankránt* and every twelfth year there is a great fair. Another of the mortals to whom temples are dedicated is Bhíma Sain, who is worshipped at Bhiri in Talli Kálíphát, at Koti in Nágpur and in other places. Festivals are held in his honour in Jeth and Mangsir and his temples are served by Khasiyas.

Ghatotkacha.

Ghatotkacha or Ghatku is worshipped in one of the oldest temples at Chauki in Káli Kumaon. The Mahábhárata relates[1] how the Pándavas on escaping from the burning house at Váranávata (Allahabad) wandered through the forests southwards along the western bank of the Ganges. Here they met Hidimba, the terrible man-eating Asura, and his beautiful sister Hidimbá. Hidimba was slain by Bhíma and his sister followed the Pándavas through the forests of Kuntit, praying Kunti, the mother of the Pándavas, to command her son Bhíma to take her to him as wife and threatening to kill herself if her request were not complied with. "So Kunti believing that the strong Asura woman experienced in the jungle, would greatly help them, in their sojournings, desired Bhíma to marry her, and he married her and in due time a son was born as robust as his parents and named Ghatotkacha. Later on we learn that Karna, the Kaurava champion, had received a lance from Indra

[1] As. Res., XIII.

which was fated to kill whomsoever it struck, and this he reserved for Arjuna, but at a critical moment of the conflict when Ghatotkacha was causing dire destruction amongst the Kauravas, Karna hurled the consecrated weapon against him and slew him. This scene is alluded[1] to in several of the dramatic compositions, and thus in the *Mudra Rákshasa* :—

> "So fate decreed, and turned aside the blow;
> As Vishnu, craftily, contrived to ward
> The shaft of Karna from the breast of Arjuna
> And speed it to Hidimbá's son."

Gorakhnáth.

Gorakhnáth, the founder of the sect of Kánphata Jogis, has an establishment in his honour in Srinagar where he is recognized as an incarnation of Siva. He was a contemparary of Kabír and, according to Wilson, flourished in the beginning of the fifteenth century. The popular worship of Siva as Bhairava belongs to his followers in the Kumaon Himálaya, as also does the Saiva worship of Pasupatináth and Sambhunáth in Nepál and Gorakhnáth in Gorakhpur. He is regarded as the special protector of the Gorkhális. Avalokiteswara Abjapáni or Padmapáni, according to a local legend communicated by Mr. Brian Hodgson,[2] descended by command of Adi Buddha as Matsyendra. "He hid himself in the belly of a fish in order to hear Siva teach Párvati the doctrine of the *yoga*, which he had learned from Adi Buddha, and which he communicated to his spouse on the sea-shore. Having reason to suspect a listener, Siva commanded him to appear, and Padmapáni came forth clad in raiment stained with ochre, smeared with ashes, wearing earrings, and shaven, being chief of the Yogis. He was called Matsyendranátha, from his appearance from a fish (*mátsya*) and his followers took the appellation of *Náth*. We have in this story a decided proof of the current belief of a union between the Yogi sectaries and Bauddhas, effected, perhaps, by the Yogi Matsyendra, but converted by the Bauddhas into a manifestation of one of their deified sages." From the foundation of the establishment at Srinagar in 1667A.D. to the present day there have been seven Mahants:—Bhotiya Sahajnáth; Bálaknáth; Tírthanáth; Gamírnáth; Monoharnáth; Pratápnáth and Sáraswatináth.

[1] Wilson, XII., 186. [2] Given by Wilson, II., 30; I., 214.

In a controversial tract,[1] describing a conversation between Kabír and Gorakhnáth, the latter calls himself the son of Matsyendra or Machchhendranáth and grand-son of Adináth, but one of the works of the sect places "Matsyendra Náth prior to Gorakh by five spiritual descents which would place the former in the fifteenth century, supposing the Kabír work to be correct in the date it attributes to the latter." Wilson adds:—"If the date assigned by Hamilton to the migration of the Hindu tribes from Chitor, the beginning of the fourteenth century, be accurate, it is probable that this was the period at which the worship of Siva, agreeably to the doctrines of Matsyendra or Gorakh, was introduced there and into the eastern provinces of Hindustan." Gorakhnáth was a man of some learning and has left behind him two Sanskrit works, the *Goraksha sataka* and *Goraksha kalpa*, and probably a third, the *Goraksha sahasra náma*, may be attributed to him.

Existing temples.

In the following list of the principal temples in Kumaon and Garhwál an attempt has been made to classify the deities worshipped according to the two great divisions already noticed. This shows the comparative popularity of the particular form and enables us to ascertain more accurately the character of the existing worship. The first column gives the village and sub-division within which the temple is situate, the second column gives the name of the temple or deity worshipped, and the third column, the time at which any important religious observance takes place or other matter of interest.[2]

Locality.	Name of temple or deity.	Explanation.
	(*a*) SAIVA TEMPLES.	
	(1) *Temples to the male form of Siva.*	
	KUMAON.	
Almora ...	Nágnáth ...	Is worshipped daily: endowed by Katyúri and Chand Rajas.
Ditto ...	Ratneswar ...	Is worshipped daily: has two villages from Gorkhális.

[1] Price's Hindi Selections, 140.

[2] The notes in the column of explanation are derived from an examination of all the claims to revenue-free grants made by the priests to Mr. Traill at the British conquest in 1815 and since then in the civil courts. It has been a very laborious task, but was necessary to check the dates given in the local histories.

Locality.	Name of temple or deity.	Explanation.
Almora ...	Bhairava ...	There are six to this form with the prefixes Sankara, Sáh, Gaur, Kál, Batuk and Bál.
Ditto ...	Dípchandeswar ...	Daily worship: founded by Raja Díp Chand in 1760 A. D.: has three villages
Ditto ...	Udyotchandeswar...	Daily worship: founded by Raja Udyot Chand in 1680 A. D.
Ditto ...	Someswar ...	Daily worship and fair on Siurátri and Holi, 14th.
Ditto ...	Kshetrpál ...	Daily worship: endowed by Kalyán Chand.
Bhatkot, Bisaud ...	Kapileswar ...	Fair at *Uttaráyini*: endowed by Díp Chand.
Borárau ...	Pinákeswar ...	Fair on Kárttik *puránmási*: endowed by Báz Bahádur.
Ditto ...	Sukeswar ...	Endowed by Chand Rajas.
Ditto ...	Rupeswar ...	Ditto.
Khatyári, Syúnara,	Betáleswar ...	Fair on Phálgan Badi 14th and Mekh sankránt.
Bhím Tál ...	Bhímeswar ...	Endowed by Díp Chand: fair Mithan sankránt: *bagwáli* at Holi.
Bisang ...	Risheswar ...	Endowed by Chand Rajas; fair Naurátri.
Mar, Baraun ...	Pátál Bhubaneswar	Endowed by Jagat Chand: cave temple fair Phálgun Badi 14th.
Pansát, do. ...	Koteswar ...	Endowed by Chand Rajas: fair Kárttik Badi 14th.
Rámeswar, Bel ...	Rámeswar ...	Endowed by Udyot Chand: fair, last day of Baisákh and Kárttik; Makar sankránt and Phálgun Badi 14th.
Mahar, Sor ...	Jaganáth ...	Endowed: fair on Anant 14th.
Waldiya, do. ...	Thal Kedár ...	Endowed: fair on Bhádon Sudi 3rd.
Sírakot do. ...	Bhág Ling ...	Fair on Bhádon sudi 14th.
Mar, Saun ...	Pacheswar ...	Fair on Makar sankránt, commercial also.
Thal, Baraun ...	Báleswar ...	Endowed by Udyot Chand; great fair Makar Sankránt.
Dindihát, Sira ...	Pábaneswar ...	Endowed: fairs Kárttik Sudi, Phálgun Badi 14th.
Askot ...	Malik Arjun ...	Endowed by Rájbár of Askot.
Champáwat ...	Báleswar ...	Endowed by Chand Rajas: fair Kurk Sankránt.
Ditto ...	Nágnáth ...	Endowed by Díp Chand: served by Pír of Kánphata Jogis; fair Chait 8th.
Chauki, Chárál ...	Ghatku ...	Endowed by Kalyán Chand: fair Asárh Sudi 8th.
Maloli, Nayán ...	Níleswar ...	Endowed by Gorkhális: fair Shiurátri.
Chaukot ...	Briddhkedár ...	Endowed by Rudr Chand: fair Kárttik, Baisákh purnamási.
Kuna, Dwára ...	Bibhandeswar ...	Fairs Phálgun Badi 14th and Mekh sankránt.
Dwára ...	Nágarjun ...	Endowed by Udyot Chand.
Baijnáth ...	Baijnáth ...	Endowed by Jagat Chand: fair Phálgun Badi 14th.

Locality.	Name of temple or deity.	Explanation.
Bágeswar ...	Bágnáth ...	Endowed : great religious commercial fair on *uttaráyani*.
Papoli, Nákuri ...	Ugra Rudra ...	A great fair on the Nág-panchami.
Utoda, Sálam ...	Uteswar ...	Endowed by Chand Rajas : fair on Shiurátri.
Dárún ...	Jágeswar ...	Great fairs on Baisákh and Kárttik 14th : the largest endowment in Kumaon.
Ditto ...	Briddh Jágeswar ...	

GARHWÁL.

Srinagar ...	Kamaleswar ...	Daily worship : endowed by Pradípt Sáh : fair Shiurátri.
Ditto ...	Kapila Muni ...	Ditto ditto ditto.
Ditto ...	Gorakhnáth ...	Daily worship : served by Jogis.
Koteswar, Chalansyún.	Koteswar ...	Daily worship : sanads lost : fair on Bikh Sankránt.
Idwálsyún ...	Bhilwa Kedár ...	Daily worship : sanads lost : fair : served by Gosháins.
Dyúl, Mawálsyún ...	Bineswar ...	Daily worship : sanads lost : fair Kárttik purnamási.
Pátal, Mandarsyún,	Ekásur ...	Daily worship : endowed by Mán Sáh : two fairs.
Gartara, Nágpur ...	Naleswar ...	Daily worship : endowed by Fatehpat Sáh : served by Gosháins
Jilásu, do. ...	Jileswar ...	Daily worship : endowed by Pradípt Sáh.
Guptkáshi, do ...	Visvanáth ...	Daily worship : endowment confirmed by Gorkhális.
Ger do. ...	Madmaheswar ...	Daily worship : connected with Kedárnáth.
Chaupatta do. ...	Tungnáth ...	Under this name there are temples on the peak, at Dharsil, Jákh, Nárí and Thiang endowed.
Kála Pahár do. ...	Rudranáth ...	Also at Gangolgaon : endowed.
Gothala ...	Gopeswar ...	Endowment confined by Gorkhális.
Kshetrpál Pokhri do.	Nágrája ...	...
Urgam do. ...	Kalpeswar ...	Of local importance.
Ditto do. ...	Briddh Kedár ...	Ditto.
Sahaikol do. ...	Sarbeswar ...	Connected with Gopeswar : served by Gosháins.
Pandukeswar ...	Pandukeswar ...	Of local importance.
Badrináth ...	Mahádeo ...	Served by Maliya Brahmans.
Langúrgarh ...	Bhairava ...	Endowed by Lalípat Sáh.
Dungari, Chándpur,	Sileswar ...	Endowed by Pradípt Sáh : Sanyásis officiate.
Kaub, Pindarwár ...	Kaubeswar ...	Endowed : confirmed by Gorkhális : fair Shiurátri.
Míng, do. ...	Míngeswar ...	Endowed : sanads lost ; called after Míng Rishí.
Icholi, Pindarpár ...	Baitaleswár ...	Endowed : confirmed by Gorkhális.
Látugair, Lohba ...	Jhanankár ...	Endowed : confirmed : served by Gosháins.
Kedárnáth.	Kedárnáth ...	Endowed : separately noticed.

Locality.	Name of temple or deity.	Explanation.

(2) *Temples to the female form of Siva.*

KUMAON.

Almora ...	Nanda ...	Fair on 7th to 9th Bhádon Sudi : endowed by Udyot Chand.
Ditto ...	Putresvari ...	Endowed by Katyúris : fair Phálgun Badi 14th.
Ditto ...	Kot kálika ...	No fair.
Ditto ...	Yákshani ...	Endowed : daily worship.
Ditto ...	Ambika ...	No fair.
Tikhún ...	Syáma ...	Endowed by Gorkhális : fair Asárh and Chait Sudi 8th.
Dúnagiri ...	Durgá ...	Fair in Asárh and Chait Sudi 8th.
Uchyúr ...	Vrinda ...	Endowed of old : fair ditto.
Dhurka Dánda, Sálam.	Durga ...	Fair in Asárh 8th.
Amel, Kosiyán ...	Upharni ...	Another name of Nanda : fair Jeth Dasahra.
Hát, Bel ...	Kálika ...	Has a large endowment from the Chand Rajas.
Mahar ...	Mallika ...	Fair : endowed.
Mar, Saun ...	Akásabhájini ...	A great fair on the last day of Chait.
Askot ...	Kálika ...	Fair Pús Sudi 14th.
Tallades ...	Purnagiri ...	Endowed by Jagat Chand.
Páli, Dora ...	Naithána ...	Fair Asárh and Chait, 8th ; has a village from Gorkhális.
Dhudiya, Giwár ...	Ugyári ...	Fair : endowment confirmed by Gorkhális.
Ranchula, Katyúr,	Bhrámari ...	Fair : Chait-kuar, 1st to 9th : endowed by Jagat Chand.
Ranchula kot ...	Nanda ...	Fair : 8th Asárh Sudi.
Pungaraun ...	Kotgári ...	Fair : ditto, grant confirmed by Gorkhális.
Devi Dhúra ...	Várábi ...	Endowed by Chand Rajas : fair Srávan Sudi purnamási.
Naini Tál ...	Naini ...	Fair 10th Jaith at Bhuwáli.

GARHWÁL.

Deurári, Nádalsyún	Mahisha mardini or Deurári Devi.	Fair : endowed by Ajayapál Sáh : served by Unyáls.
Srinagar ...	Jwálpa Devi ...	Fair : by Pradhuman Sáh : served by Thapalyáls.
Bhatgaon, Ghurdursyún.	Kálika ...	Fair : no sanads.
Near Nagár, Kapholsyún.	Jwálpa Devi ...	Endowed by Pradhuman Sáh : Thapalyáls serve the goddess.
Dhani, Chalansyún,	Kalyáni ...	Endowed : sanads lost : idol on the river's bank.
Phegu, Nágpur ...	Nan Durga ...	Endowed in 1795 : fair on Naurátri : served by Dumágis.

Locality.	Name of temple or deity.	Explanation.
Biraun, Nágpur...	Chamandi ...	Served by Dyúl Brahmans.
Julai, ditto ...	Jwálpa ...	Served by the village Brahmans.
Ukhimath, ditto ...	Ukha ...	Connected with Kedárnáth.
Urgam, ditto ...	Gauri ...	Separate establishment.
Maikbanda, ditto ..	Mahisha Mardini ...	Belongs to Kedárnáth.
Tarsáli, ditto ...	Chandika ...	Fairs: served by Dhaswál Brahmans.
Naíti, Chandpur ...	Upharni ...	Endowed: fair every Sankránt and Chait naurátris.
Karnprayág ...	Uma ...	Endowed by Jaikrit Sáh: served by Sati Brahmans.
Krúr, Dasoli ...	Nanda ...	Endowed by Shám Sáh: fair Nandáshtami.
Hindoli, ditto ...	Ditto ...	Endowment confirmed by Gorkhális fair.
Nauli, ditto ...	Láta ...	Endowment confirmed on Nandásh. tami.
Tapuban ...	Gauri ...	Served by Byágdhárkot Brahmans.
Joshimath ...	Nau Durga ...	Fair on Naurátri.

(*b*) VAISHNAVA TEMPLES.

(1) *To the male form of Vishnu.*

Kumaon.

Almora ...	Siddha Nar Singh...	Endowment by Gorkhális: served by Acháryas.
Ditto ...	Raghunáth ...	Endowment 1788: served by a Brahmáchárya.
Ditto ..	Rámpaduk ...	Fair: Chait Sudi 9th.
Giwár ...	Rám Chandra ...	Fair.
Bágeswar ...	Beni Madhub ...	Fair: endowed by Chand Rajas.
Ditto ...	Triyugi Náráyan ...	Fair endowment by Chand Rajas.
Pungaraun ...	Kálinág ...	Fair: possession confirmed by Gorkhális.
Dwára ...	Badrináth ...	An old foundation.

Garhwál.

Srinagar ...	Lakshmi Náráyan...	Eight temples of this name, served by Bairágis: the Sankara math was endowed by Fatehpat Sáh.
Ditto ...	Badrináth ...	Fair Janmáshtami: endowed by Fatehpat Sáh.
Ditto ...	Sítaráma ...	Served by Bairágis.
Sivanandi, Dhanpur,	Lakshmi Náráyan...	Endowed by Pradipt Sáh: built by a Dobhál Brahman.
Lugai, ditto ...	Nar Sinh ...	Endowed: sanads lost: served by Bairágis: janmlila.
Dyúl, Sitonsyún ...	Lakshmanji ...	Endowed: confirmed by Pradhuman Sáh: fair.
Bidyakoti, Kandwálsyún.	Murli Manohar ...	Endowed by Fatehpat Sáh and founded by Bidyapati Dobhál.

Locality.	Name of temple or deity.	Explanation.
Baniai, Nágpur ...	Agastya Muni ...	Endowed : served by Bijwál Brahmans : fair.
Chandrapuri, Nágpur.	Murli Manohar ...	Endowed by Pradípt Sáh ; served by Bairágis.
Síla, Nagpur ...	Ditto ...	Endowed served by Jogis.
Hát, ditto ...	Náráyan ...	Endowed : by Mán Sáh : attached to Badrináth.
Khetrpál Pokhri ...	Nar Sinh ...	Of local importance only.
Urgam ditto ...	Dhyán Badri ...	Endowed as part of Badrináth and separately noticed.
Vishnuprayág, Painkhanda.	Vishnu ...	Endowed : fair Vikhbati, makar sankránt, Dasahra.
Pandukeswar, Painkhanda.	Yogbadri ...	Endowed fair : served by Dakhini Bhats.
Badrináth, Painkhanda.	Badrináth ...	Endowed fair : separate notice.
Gulábkoti Painkhanda.	Murli Manohar ...	Endowed : possession confirmed by Gorkhális.
Joshimath do. ...	Nar Sinh ...	Endowed : connected with Badrináth.
Ditto do. ...	Básdeo ...	Ditto ditto.
Ditto do. ...	Garura ...	Ditto ditto.
Ditto do ...	Bhagwati ...	Ditto ditto.
Tapuban do. ...	Bhavishya Badri ...	Ditto ditto.
Animath ...	Briddh Badri ...	Ditto ditto.
Nandprayág, Nágpur,	Náráyan ...	Ditto ditto.
Triyugi do. ...	Triyugi Náráyan ...	Endowed : separately noticed.
Maikhanda do. ...	Ditto Jákh ...	Endowment confirmed by Gorkhális.
Rámjani Udepur ...	Ráma ...	Endowed by Gorkhális fair.
Háthisera, Chándpur	Adbadri ...	Endowed : served by Tháplyáls, old temples.
Semli, Pindarpár ...	Badrináth ...	Endowment confirmed by Gorkhális.
Náráyanbugr, Karákot.	Náráyan ...	Connected with Badrináth.
Kimoli, Kapíri ...	Ditto	Served by Tháplyál Brahmans.

(2) *To the female form of Vishnu.*

GARHWAL.

Chám, Nágpur ...	Síta ...	Endowed : connected with Badrináth.
Badrináth ...	Lakshmi ...	Endowed : connected served by Dimris.

Local deities.

We have now to notice the forms that can hardly be assigned to any of the orthodox systems, but which still claim attention as collectively representing the genii, sprites and goblins from whom the Pasupati form of Siva was evolved. Although the constant communication with the plains through the pilgrims to the great shrines had a marked influence on the religion of the inhabitants of this portion of the

Himálaya, still the belief in demons and sprites, malignant and beneficent, has almost as firm a hold on the great mass of the people as ever it had and the worship of Goril, Chaumu and the Bhútinis is as general and sincere as that of Siva and Vishnu. Mr. Traill, in one of his reports, writes :—"An attempt to collect the numerous superstitious beliefs current in these hills (Kumaon Himálaya) would be an endless task, the result of which would by no means repay the labor bestowed, as these beliefs are for the most part rude and gross, displaying neither imagination nor refinement in their texture." Notwithstanding this adverse criticism an account of the people as they are would be imperfect without some allusion to their superstitions which also afford us a clue to the growth of the existing form of worship.

Satyanáth.

In one of Sanjaya's discourses on the character of Krishna, in the Mahábhárata, he says:—"Krishna is based on truth (*satye*) and truth is based on him and Govinda is truer than truth, therefore he is called Satya." This name as Satyanáth occurs several times in the lists and is by some regarded as a Saiva form under the name Satyanáth and by others as a Vaishnava form under the name Satya Náráyan. Satyanáth is also called Siddh Satyanáth or merely the Siddh and would appear to me to represent one of those non-Bráhmanical deities affiliated to the regular system in course of time and adored indifferently by followers of the two great Hindu sects. Dewalgarh, some few miles from Srinagar, is generally acknowledged to be the oldest seat of local government in southern Garhwál, and it is here we have the oldest and most honored temple of Satyanáth. The service of the temple is now conducted by Jogis and their chief has the title of Pír. There is evidence to show that at a very early period this deity was a favourite object of worship with the petty Rájas of the country. It was here that one of the ancestors of the present Rája of Tihri met the Siddh and so pleased the god by his devotion to Ráj-rájeswari that the Siddh raised him up in the hollow of his hand and promised him the entire country so far as he could see. The Rája saw the hills from the Káli to Dehra Dún and from Tibet to Nagina in Bijnor, and though none of his descendants ever held possession of such an extensive tract of country, if we may except the short and troubled rule of Pradhuman Sáh,

still the fane[1] of the benevolent Siddh has ever since had many worshippers. It is said that during the Satya Yug the god was represented by a mighty grain of wheat, enveloped in gold and placed on the *sinhásan* or throne within the temple, but that since the Káli Yug commenced this practice has been abandoned.

Ráj-rájeswari.

Ráj-rájeswari is worshipped with Satyanáth and appears to be specially regarded as his Sakti. This goddess has from ancient times been an object of veneration to the petty Rájas of Garhwál, who were accustomed to assemble twice a year at her darbár in Dewalgarh and supplicate her protection over their respective countries. In the local legend connected with Satyanáth, the gift of the country "so far as he could see" was made by Satyanáth to the Rája of Srinagar as the fruit of the Rája's devotion to Ráj-rájeswari. The goddess is usually represented as seated on a throne, the three feet of which rest on figures of Brahma, Vishnu, and Siva. The special worship takes place on the *naurátri* of Chait and Asan and at the two harvest seasons, and is conducted by Khasiyas.

Ghantakarn.

Ghantakarn or Ghandyál is one of those anomalous forms worshipped by the lower classes principally. He has eleven temples to his name and in one of them is worshipped with Nágrája, which is commonly considered a Vaishnava form. He is mentioned in the account of Badrináth, also, as one of the attendants on Vishnu. At the same time, he is entered in my lists as a Saiva form and is ordinarily considered an attendant of Siva and by some as a manifestation of Ganesha. The name 'Ghantakarna' means 'he who had ears as broad as a bell' or 'who has bells in his ears.' He is supposed to be of great personal attractions and is worshipped under the form of a water-jar as the healer of cutaneous diseases. He is the same with the Vítarága Abjapáni of the Bauddha system of Nepál whose symbol is also a water-jar. Services are held in his honour by Khasiya Brahmans or the villagers themselves at the two harvest seasons and on fixed days in Bhado. He is

[1] There are also temples to this deity at Thán in Patti Udepur; Bidoli in Bidolsyún; Nawásu in Bachhansyún; Ránsi-Tarsáli in Kálíphát; all in Garhwál, and at Mánil in Patti Nayán in Kumaon. The Thán Jogis have of late become grihasthas or householders and are now known as Sanwáns.

gate-keeper in many of the Garhwál temples and is worshipped on a ridge at Ghandyál in Patti Manyársyún by Naithána Brahmans, also at Thápli in Patwálsyún, Bhainswára in Khátsyún, Mána in Painkhanda, in Síli Chandpur, Dhaijyúli, Chauthán, and Ránigadh. Siddh-Baurái, another form of the same deity, has a temple dedicated to him at Kamera in Patti Katholsyún and endowed in 1744 A.D. It is served by Kánphata Jogis. Garíbnáth Siddh is worshipped at Síla in Patti Síla by Jogis, the Jákh Debta in Birsaun and Tháing in Nágpur, and Kaila Pír by Gairi and Lakhera Brahmans at Lobhagarh. Their festivals take place at the harvest seasons.

Bholanáth.

The current legend regarding the origin of the local deity Bholanáth and his consort Barhini forms one of the connecting links between the Bráhmanical system of the present day and the universal hierarchy of sprites and goblins common to all mountainous countries. With the better classes Bholanáth is recognized as a form of Mahádeo and Barhini as a form of his Sakti, thus meeting the requirements of the popular worship and the demands of the orthodox school, but it is evident that the idea of deifying mortals is an old one and in this case merely localised to explain the origin of a class of temples which are acknowledged not to belong to the orthodox forms of Mahádeo. One story tells us how Udai Chand, Raja of Almora, had two ránís, each of whom bore him a son. When the children arived at man's estate, the elder of the two took to evil courses and was disinherited and left Kumaon. The youngest, in course of time, succeeded his father as Gyán Chand and his administration gave great satisfaction and relief to the people. Gyán Chand had been some years on the throne when his elder brother returned to Almora and in the guise of a religious mendicant took up his quarters near the Nail tank. In spite of the disguise several recognized the disinherited prince and conveyed the news of his arrival to his more prosperous brother. Gyán Chand became alarmed and gave order for the assassination of his brother, which was carried out by a man of the Báriya or gardener caste. The elder prince and his pregnant mistress were both slain near the temple of Sítala Devi. This mistress was the wife of a Brahman and her connection with the Chand prince was considered something more than adulterous. After death, the elder brother became a Bhút or goblin under the

name Bholanáth, his mistress became a Bhútini under the name Barhini, which is, perhaps, a corruption of Brahmani, and their unborn child also became a Bhút. These three goblins vexed the people of Almora, but more especially the gardener caste, until at length eight temples were built and dedicated to them. These still exist and are called:—(1) Kálbhairav; (2) Batukbhairav; (3) Bálbhairav; (4) Sáhbhairav; (5) Garhibhairav; (6) Anandbhairav; (7) Gaurbhairav and (8) Khutkouiyabhairav. These temples are much resorted to by the lower classes, especially by the gardener caste, who attribute all misfortunes that occur to the malign influence of Bholanáth and his companions and on this account attempt to propitiate them with worship more frequently than other classes do. A small iron trident is sometimes placed in the corner of a cottage as an emblem of Bholanáth and is usually resorted to when any sudden or unexpected calamity attacks the occupants. Another legend as to the origin of Bholanáth makes him a wandering mendicant who came to a Raja of Almora and, although the doors were shut, miraculously entered the inner apartment where were the Raja and his Ráni. The Raja enraged at the intrusion and not remembering that the doors had been closed, slew the Jogi and again retired to rest, but soon found the couch on which he lay was possessed and was able to throw him off on to the ground. This was repeated several times and at length he left the room and next morning appealed to his courtiers for advice, and they informed him that he must have killed some very holy person and that it would be well to propitiate him and thus allay his wrath. The Raja accordingly built the eight temples to Bhairava in Almora and made arrangements for their support. My informant goes on to say that after the British conquest, owing to the confusion in the administration consequent on the new arrangements, the worship at these temples fell into disuse; "but Bholanáth showered such storms of stones on the British camp that the English gentlemen at once awoke to the importance of this deity and provided for his worship in a suitable manner!" The Chuniya Muniya Bhairava near Srinagar is served by Jogis and generally this class conducts the worship where it is not performed by Khasiyas. The festivals take place at the harvest seasons and in some temples at every *sankránt*. The eight gates of Siva's city are watched by Bhairavas and

the following list of these watchmen, obtained from a Madrási mendicant in Garhwál, may be of interest:—

Names.	Colour of the body.	Vehicle on which he rides.	Sakti or female energy.
1. Gananetra ...	Golden ...	Swan ...	Bráhmi.
2. Chanda ...	The sky at dawn,	He-goat ...	Mahesvari.
3. Kápa ...	Blood ...	Peacock ...	Kaumári.
4. Unmatta ...	Yellow ...	Lion ...	Vaishnavi.
5. Naya ...	Blue ...	Buffalo ...	Váráhi.
6. Kapáli ...	Ruby ...	Elephant ...	Mahendri.
7. Bhishana ...	Black ...	Crow ...	Chámundi.
8. Sankara ...	Molten gold ...	Rat ...	Káli.

Mhasoba and Jokhai are worshiped in upper western Garhwál under the form of a ling-shaped boulder daubed with red and somewhat resemble Bhairava in their attributes.

Ganganáth.

Ganganáth is one of the favourite deities of the Doms and his origin is thus accounted for:—The son of Bhabichand Raja of Doti quarrelled with his family and became a religious mendicant. In the course of his wanderings he arrived at Adoli, a village in Patti Sálam, and there saw and fell in love with the wife of one Krishna Joshi. This Joshi was a servant at Almora, and the Jogi disguised himself as a labourer and took service in the house where the woman lived. When Krishna heard of the intrigue he set out for Adoli and with the aid of one Jhaparua Lohár murdered his wife and her lover. Like Bholanáth and his companions, the Jogi, his mistress and the unborn child became goblins and vexed the people, so that they built a temple and forthwith instituted a regular service in honour of the three sprites. From Adoli the cult of Ganganáth spread over Kumaon and at Takuriya, Lwáli and Narai in his home Patti[1] we have temples to his honour. He is supposed especially to harass the young and beautiful, if they do not propitiate him. When any one is aggrieved by the wicked or powerful he goes to Ganganáth for aid, who invariably punishes the evil-doer. He sometimes possesses a follower and through him promises all that they desire to those who offer the following articles:—to Ganganáth himself a kid, cakes, sweetmeats, beads, a bag and a pair of Jogi's earrings; to his mistress Bhána, a petticoat, a *dopatta* and a nose-ring,

[1] Mahendra Singh, Búrha of Takuriya, is credited with the introduction of the cult of Ganganáth into Sálam.

and to the child a coat and anklets, altogether forming a fair spoil for the Ghantuwa or astrologer who conducts the ceremonies. During the ceremony the following verse is repeated thrice:—

"Ai garo báyo (bis) doti ko uthiyo, káli tír áyo (bis)
Jogi re Gangindtha, káli tír áyo (bis.)"

There is also a song reciting the adventures of the prince during his wanderings, each verse of which winds up with the above lines as a refrain. The person who acts the part of one possessed by any Bhút is called '*Dungariya.*'

Masán, Khabísh.

The demon Masán is usually found at burning-grounds, which are as a rule placed at the confluence of streams: hence called *marghát.* He has a temple at Kákarighát on the Kosi in Kandárkhuwa, parganah Phaldákot, and numerous small memorials at all burning ghats. Persons possessed without any assignable cause are for the time being said to be under his influence. Masán is supposed to be of a black colour and hideous appearance; he comes from the remains of a funeral pyre and chases people passing by who sometimes die from fright, others linger for a few days and some even go mad. When a person becomes possessed by Masán, the people invoke the beneficent spirit of the house to come and take possession of some member of the family and all begin to dance. At length some one works himself into a state of frenzy and commences to torture and belabour the body of the person possessed by Masán until at length a cure is effected or the person perishes under the drastic treatment. Khabísh resembles Masán in his malignant nature and fondness for charnel grounds. He is also met with in dark glens and forests in various shapes. Sometimes he imitates the bellow of a buffalo or the cry of a goat-herd or neat-herd and sometimes he grunts like the wild-pig. At other times he assumes the guise of a religious mendicant and joins travellers on their way, but his conversation is always unintelligible. Like Masán, he often frightens people and makes them ill and sometimes possesses unfortunate travellers who get benighted. Both these demons possess many of the attributes of Chámunda Devi, one of the Sakti forms of Siva, of whom some account has been given elsewhere.

Goril.

Goril, who is also called Goriya, Gwel, Gwall and Gol, if we judge from his general repute and the number of temples to his name, is the most popular of all the deities worshipped by the lower classes in Kumaon. He has formal temples at Chaur, Garura and Bhanári in Borárau; at Basot in Uchakot: Tarkhet in Malli Doti: Mánil in Nayán: Gol Chaur in Káli Kumaon: Kumaur in Mahar and Gágar Gol in Katyúr. He is also worshipped at stated intervals at Hairiyagaon in Chhakháta, Ránibág in Chauthán, Silangi in Chaugaon, Thán in Katyúr and Damanda Uniyál in Patti Udepur of Garhwál. He has local names derived from some celebrated form or person like Siva: thus the Goril at Garura is also known as the Iriyakot Goril, that at Basot as the Hairka Goril from the caste of that name and that at Thán as Saman. The local legend as to his origin tells us that once upon a time Jhálrái, the Katyúri Raja of Champáwat, went to hunt in the forests near the Káli river. Unfortunate in the chase he came, weary and disappointed, to the village of Dubachaur and saw two buffaloes fighting together in a field. The Raja in vain tried to separate them and being very thirsty sent one of his servants to fetch some water, but none was found. A second servant volunteered to search the neighbouring hills and whilst wandering about heard the noise of two waterfalls and going towards them soon found himself in a little garden attached to a hermitage. The waterfalls were within the garden and pushing his way towards them, he found himself obliged to pass through the hermitage, and there he saw a beautiful woman so deeply immersed in contemplation on the deity as to be altogether lost to all external influences. Seeing her in this condition the servant resolved to break the spell and in a loud tone asked who she was. She slowly opened her eyes and as if recovering from a trance begged him not to cast his shadow over her and so disturb her meditations. He then told her who he was and why he had come to the hermitage and received permission to draw some water for the Rája. He then approached the water-jar bottom foremost to the waterfall, and the water and spray rebounded on to the maiden, who at once arose and said it was no wonder that everything was done upside down by the followers of a Rája who was not able to separate even two fighting buffaloes. The servant astonished at this remark

begged her to accompany him to his master and attempt the feat herself. The maiden consented and gliding onwards, as if in a dream, she reached the place where the buffaloes were still contending; then meditating on the deity she advanced and seized each by the horns and separated them. The Rája was amazed and demanded of her what manner of woman she was, and she told him that she was Káli, the niece of a Rája with whom she was engaged in great austerities for the purpose of propitiating the deity until disturbed by his servant.

The Rája, thereon, resolved to marry the maiden and visited her uncle, whom he found to be an old leper suffering terribly from that loathsome disease. So strong, however, was his love for Káli that the Rája remained for several days performing menial services for the old man, who was so pleased that he gave permission to the Rája to marry his niece. She had devoted herself to a life of celibacy, but at her uncle's command married the Rája and lived very happily with him. In due time Káli became pregnant, and the Rája being obliged to absent himself from home charged her to ring a bell which he attached to his girdle, should a male child be born during his absence and he would at once return. The other wives of the Rája were envious of Káli and determined to thwart her in every way, and one of them rang the bell though Káli had not yet been delivered. The Rája at once returned and was very angry at having been deceived and set off on his travels again. In the meantime Káli gave birth to a beautiful son, but the other Ránis placed a bandage over her eyes and removing the child, showed her a pumpkin which they said she had given birth to. The boy was then placed in an iron cage and buried in a pit lined with salt, but lo! the salt turned to sugar and the boy ate thereof and flourished. But nothing daunted by this visible sign of protecting influence, the Ránis took cage and boy and flung them into the river, when again the cage floated down the current and came to land near a fisherman's hut. Now the fisherman was childless and deeming the boy a gift from the gods took him to his house and brought him up as his own child. The boy grew up to man's estate and one day asked his reputed father for a wooden horse, on which he rode to the ghát where the wicked Ránis used to go for water and broke all their water-jars, saying that he was

in a hurry to make his horse drink. They all laughed at the idea, but he retorted and said that if it were possible for a woman to give birth to a pumpkin, it was possible for a wooden horse to drink water. This story reached the ears of the Rája, who sent for the boy and in presence of the entire court, the boy recounted the wrongs done to his mother by the Ránis and the deception that had been practised on the Rája. The boy was at once recognized as the son of the Rája and the Ránis paid the penalty of death by being boiled alive in cauldrons of oil. In course of time the young prince succeeded his father and as every one believed him possessed by a portion of the deity from the knowledge of the past shown by him in his discomfiture of the Ránis, he was an object of worship even during his own lifetime and since his death is recognized all over Kumaon. The river down which the iron cage floated is the Goriganga and hence his name Goril. A curious story is told to explain the neglect of the cult of Goril in Garhwál:—"One day Sudarshan Sáh heard the sound of drumming and dancing in one of his courtyards and on inquiring the cause was told that Goril had taken possession of one of his female slaves. The Rája was wrath and taking a thick bambu cane so laid about him that the votaries of Goril declared that the deity had departed. The Rája then prohibited the possession of any one by Goril, and now if any Garhwáli thinks himself possessed, he has only to call on the name of Sudarshan Sáh and the demon departs."

In some places a regular daily worship of Goril is established and assemblies are held on fixed dates. At Hairiyagaon there is a great fair and at Chaur and Silangi, the '*bagwáli*' or 'stone-slinging' festival is observed. The Goril of Thán, so well known in Katyúr, is sought after by sick people and every third or fourth year he is made the object of special worship. As a rule, the harvest seasons in Jeth and Mangsír and the triennial periods which fall at the same seasons are the times of worship commonly observed. Besides the more well-known temples already enumerated there are numerous small miniature temples erected on the hills above the villages in some secluded place and dedicated to these village gods. The ceremonies observed are very simple: when any one is attacked by sickness, one of his relatives takes a

handful of rice and a copper coin bound up in a piece of cloth and waves them three times round the sick person's head, asking that they may know what *bhút* has taken possession of the sick man. In each group of villages there is some cunning low-caste Brahman or Khasiya, often of bad character, who has taken upon himself the profession of Ghantuwa or astrologer, and to him the friends of the sick man resort with the bag of rice (called *púa*) and beg of him to say what *bhút* has possessed their relative and whence it came and how it is to be expelled. The Ghantuwa takes the rice in his right hand and then shaking it about and muttering some unintelligible words, declares it is Goril or Masán or Haru that afflicts the sick man, perhaps because he injured such and such a person, or because he was remiss in his dues to the temples and that he came of his own accord or was sent by some deceased relative. In such cases the Jagariya and his assistant are called in and they play a drum and tambourine whilst the relatives of the sick man dance until one is supposed to be possessed, and while in this state explains the cause of the *bhút's* anger. The result is commonly that an offering of a kid or sweetmeats is to be made, or a temple repaired or built, and if the sick man recovers this is invariably fulfilled; if he dies, the death is put down to *karm rog* or disease independent of the influence of the *bhúts*. If any one has been defrauded by a neighbour he, in like manner, brings the rice (*púa*) to the temple of Goril or some other of the popular local genii and places it before the stone which represents the deity and prays him to vex his enemy. This is an effective method of obtaining justice without the intervention of the courts, for if the person on whom the wrath of the deity has been invoked becomes ill, he has, at once, to go through the form of propitiating not only the deity but the man who invoked his power, which usually turns out to be an expensive process. Sometimes both the Dungariya, the person possessed and, therefore, for the time being, the slave of the *bhút*, or in common speech his 'horse,' and the sick person are branded with hot irons, a rude form of cautery considered efficacious in most diseases by barbarous tribes. Frequently the Ghantuwa diagnoses mere disease for which he prescribes the use of some simple herbs as a remedy and thus increases his reputation; if the sick man does not improve, he declares that the *bhút* is master, or

that the disease is such that neither *bhút* nor man is responsible or it and that it must take its course.

Kshetrpál or Bhumiya.

Kshetrpál or Bhumiya, the tutelary god of fields and boundaries, is a beneficent deity who does not as a rule force his worship on any one by possessing them or injuring them or their crops. Every village has a small temple, often no more than a few feet square, sacred to him. When a crop is sown, a handful of grain is sprinkled over a stone in the corner of the field nearest to the temple in order to protect the crop from hail, blight and the ravages of wild animals, and at harvest time he receives the first-fruits, to protect the garnered crop from rats and insect. He punishes the wicked and rewards the virtuous and is lord of the village, always interested in its prosperity and a partaker of the good things provided on all occasions of rejoicing, such as marriage, the birth of a child or any great good fortune. Unlike the other rural deities he seldom receives annual sacrifices, but is satisfied with the humblest offering of the fruits of the earth. Kshetrpál has a temple connected with the great Jageswar grant as guardian of the sacred forest of Tankarakshetra within which the temple is situated. Here he is known as Saim or Sayam, the Kumaoni corruption of Swayambhu, the Bauddha form now worshipped in Nepál. As such, he receives offerings of kids on certain fixed days. He has also a temple in Borárau where services are held every day supported by a small endowment. Saim does not always do duty as a Kshetrpál and has separate legends and observances peculiar to himself, whilst at the same time they partake generally of the character common to all demon-worship in Kumaon. He sometimes possesses persons and his sign is that the hair of the scalp-lock becomes hopelessly entangled. In Káli Kumaon, Saim is regarded as a follower of the Chand *bhút* Haru.

Airi.

Airi is a sylvan deity who is represented as hideous and repellent, with eyes on the crown of his head and four arms filled with various weapons. He remains concealed during the day, but at night comes forth from the hills and forests and wanders about accompanied by the fairies (*pari*) who join him in dance and song. Their feet are turned backwards, not forwards like those of men. During his rambles,

Airi is accompanied by his jhámpánis or litter-bearers Sau and Bhau and a pack of hunting dogs with bells around their necks. Whoever hears the dogs bark is certain to meet with some calamity. Airi himself is said to be much given to expectoration and his saliva is so venomous that it wounds those on whom it falls. The remedy for such wounds is the rite known elsewhere as '*jhár phúnk*,' when the affected part is swept or rubbed with the bough of a tree whilst incantations are sung. If this be not done quickly, the injured man dies, and in any case he has to abstain from rich and spiced food for several days. Those who see Airi face to face die of fright at his awful appearance or are burnt up by a flash of his eye, or are torn to pieces by his dogs, or have their livers extracted and eaten by the fairies who accompany him. But should any one be fortunate enough to see Airi and survive, the god discloses hidden treasure to him. The treasure-trove thus discovered varies in value, from gold mohars down to old bones.

Airi's temples are found on hills and desolate tracts and are never met with in inhabited places. In the middle of such temples are set up tridents, which represent Airi himself, and the tridents are surrounded by stones representing Sau, Bhau, the fairies, &c. But in some cases the deity and his followers are actually represented by carved images. The villagers worship him during the bright half of Chait, the expenses being met by a fund collected for the purpose. A bonfire is lighted, round which the people seat themselves. A kettle-drum is played, and one after another the members of the circle become possessed with Airi, or Sau, or Bhau, and leap and shout around the fire. Some even go so far as to brand themselves with heated iron spoons (*kálchis*) and sit down amongst the flames. Those who escape burning are believed to be truly possessed, while those who are burnt are considered mere pretenders to divine frenzy. The revels usually last for about ten nights, and until they are ended a lamp is kept burning in the shrine of the god. Those possessed with Airi are called Airi's horses or Airi's slaves (dungariya) and such persons are given alms so long as Airi's festival lasts. They dye a yard of cloth in red ochre (*geru*) and bind it around their heads; and also carry a wallet in which they place the alms they receive. While in this state they bathe twice and eat but once during the twenty-four

hours; they allow no one to touch them, as they consider other men unclean, and no one except themselves is permitted to touch the trident and stones in Airi's temple, at least so long as the festival lasts. Milk, sweetmeats, cakes, cocoanuts, and other delicacies are offered at the shrine during the course of this festival. Kids are sometimes sacrificed, and a piece of red cotton stained in the blood of the sacrifice is set up as a banner near the sacred spot. It is not to be supposed that so poor a community allow the good things offered to the god to spoil in his temple; a crowd of worshippers divide and devour the sacrificial offerings, water is sprinkled over the images or stones in the temple, and the following prayer is used:—"Hallowed God! be pleased with me, forgive my trespasses and accept this kid that is offered thee. I am devoid of understanding; thou art a knower of hearts." While this prayer is being said, a spell (mantra) is whispered in the ear of the kid that is about to be sacrificed:—

"*Asvam naiv gajam naiv sinham naiv cha naiv cha*
Ajá putro balind dyát daivo durbal ghátaka:"

"Thou are not a horse, nor an elephant nor a lion. Thou art only the son of a goat and I sacrifice thee: so god also destroys the weak."

A red mark is made on the kid's forehead, he is crowned with a garland, and (*akshat*) rice is scattered on his head, and at last some water is sprinkled over him. He shakes himself to get rid of it and this action is taken as a sign that the god has accepted him as an offering; whereupon his head is severed from his body by a blow from a *kukri* (curved knife). If on the other hand he does not shake himself, or if he bleats, it is taken as a sign that the offering is not accepted, and he escapes. After the sacrifice the kid's tail is cut off and placed in the temple beside the trident or images. His head is given to the officiating priest, and his hind leg to the man who slays him, or (in some cases) to the head-man of the village, and the rest of his carcase is distributed amongst the spectators. A kid that has in any way been maimed cannot be offered as a sacrifice. There are temples to Airi or Chulalekh above Kandra and on Airdyau-dánda in Patti Sálam where festivals are held at the Shiurátri and Asojnaurátri. This may be taken as the local indigenous form of the original montane idea of Siva.

Kalbisht.

Kalbisht or Kaluwa is said to have been a neatherd of Kwatyúra village near Binsar who flourished some two hundred years ago. Although a neatherd by occupation he was by caste a Rajpút and had many enemies. They persuaded his brother-in-law Himmat to drive a peg into the hoof of one of Kal's buffaloes, intending that Kal should be killed in attempting to extract it, but no harm ensued. Himmat next attacked Kal from behind with an axe and so wounded him on the neck that he died, but not before he had torn the treacherous Himmat limb from limb. After his death Kal became a benevolent sprite and temples have been erected to his honour at Kaiphal-khán, where the murder took place, and in other villages. The only persons that he injured in his new existence were the enemies who compassed his death. In the vicinity of Kaiphal-khán his name is used by herdsmen as a charm against wild beasts and oppressed persons resort to his temple for justice against their oppressors. The latter when punished by sickness or injury to their crops or cattle attempt to propitiate Kal by building a temple to his honour, and thus his cult has spread through the neighbouring pattis.

Chaumu.

Chaumu also is a tutelary god of cattle and has a temple to his honour at the boundary between Ryúni and Dwársaun. The story as to its origin relates how that about the middle of the fifteenth century one Ranbír Singh Rána was bringing a crystal *linga* from Champáwat to his home near Ránikhet. The stone was wrapped up in his turban and having occasion to remove his head-dress at some water near Dyárighát, he reverently placed the turban and its contents on the ground close beside him. When he attempted to raise them again however, he found he could not do so, and after several fruitless efforts he returned home and told his friends what had occurred. His friends went back and after great labour they together succeeded in lifting the turban and *linga;* the latter they secreted in the trunk of an oak tree at Ryúni, until a temple should be ready for its reception. The stone was however dissatisfied with its quarters and in the night leapt up into the trunk of another tree higher up the hill. Now it happened that this other tree grew on the boundary between Ryúni and Dwársaun. So the people of Dwársaun combined with the people of Ryúni to build

a temple on the boundary of the two villages. In this temple the crystal *linga* was ultimately placed, and the offerings made to the stone are divided between the men of Ryúni and those of Dwársaun. Raja Ratanchand of Almora heard of the virtues of this stone and set out on a pilgrimage to visit it. But he was advised that the time was inauspicious and returned without reaching his goal. Then Chaumu appeared to him in a dream and said "I am a king, and thou art no more; what honor canst thou do me?"

More than one hundred bells are hung in Chaumu's temple besides seventy or eighty lamps and a festival is held there during the first nine days of the bright-halves of Asoj and Chait. Milk is sprinkled on the *linga*, goats are sacrificed and their heads are divided between the two villages of Ryúni and Dwársaun. The *linga* was formerly famed for its miraculous powers, but these have in latter times decreased, but people still take oaths by it. The following are some of the recorded miracles. People who have lost their cattle have found them on complaining to the *linga* and vowing sacrifices thereto. Others where female cattle have been in calf, and who have vowed sacrifices on condition that the calves should be born alive, have found this ceremony completely efficacious. Those who have offered bad milk before the image have lost their cattle, and those who have offered nothing at all, or who have neglected to worship the *linga*, have found that their milk would yield no curds. It is not permissible to offer Chaumu the milk of a cow for ten days after she has calved, nor to offer him milk milked from any cow in the evening. Those who have offered him such milk have lost their cow. Those who take their cows down to the Bhábar, or any place distant from the temple, must worship the peg to which their cattle is tied, just as if it were the *linga* itself: those who have neglected to do so suffer in the same way as those who have neglected the *linga* of Chaumu himself. A man who buys a cow at Dwársaun or Ryúni must continue the cult of Chaumu's *linga* in his own village, so long as the cow itself or any of its descendants survive, as it appears that every cow is dedicated to some deity. Men may not drink milk milked in the evening from a cow dedicated to Chaumu, but they may drink milk so milked from cows dedicated to

other deities. Badhán, like Chaumu, is a tutelary god of cattle. He does not take possession of any one nor does he vex the people that do not worship him. On the eleventh day after the birth of a calf his *linga* is washed first with water and then with milk and cakes, rice and milk are offered in his temples. No animal sacrifices, however, are ever made to him.

Badhán.

Haru, a beneficent spirit, is much sought after by the Kumaonis. He was, in olden days, known as Harishchand, Raja of Champáwat, and the following story is told to explain the origin of his worship:—The Rája had grown old in years and became desirous of devoting the remainder of his life to the service of the deity, so he went to Hardwár and there became the disciple of a Sanyási and adopted a religious life. To him the local accounts attribute the building of the sacred ghát at Hardwár known as '*Hari ke pairi*.' From Hardwár he set out on the great pilgrimage and successively visited the four great *dhám*s, Badrináth, to the north; Jagannáth, to the east; Rámnáth, to the south; and Dwárkanáth, to the west. On his return to Champáwat, he continued his religious duties and taught the people the divine precepts and established a fraternity. His brother Látu and his servants Syúra, Pyúra, Ruda Kathayat, Kholiya, Bheliya, Mangaliya and Ujyáliya joined the brotherhood. Sayam or Saim, also, was a member and Baru. The Rája became the head of the community and owing to his great austerities was soon unable to move from the place where he sat in meditation on the deity. He acquired, however, such power by his mortifications that whatever he willed was accomplished; the barren became fruitful; the poor became wealthy,; the miserable, happy; the blind were restored to sight; the lame learned to walk and the wicked became virtuous. When Harishchand and his companions died, they became good spirits and the same results followed from worshipping them, unmixed good and prosperity to the faithful. It is said that where Haru and his companions abide no calamity ever falls upon the inhabitants, hence the adage:—

Haru.

"*Auna Haru harpat, jauna Haru kharpat.*"

"With Haru comes prosperity, with his departure, adversity."

There is a somewhat celebrated temple to Haru at Thán in Katyúr at which a considerable assembly takes place every third year. Látu is worshipped at Barwai in Waldiya and Bheliya at Bhatkot in Mahar.

Katyúri Rajas.

At Taili Hát in Katyúr we have a place known as the Indra Chabútra, which consists of three separate platforms (*chabutra*) or level places, on one of which is a *silang* tree (*Olea acuminata*) and on another an image of Goril and certain figures known as the Katyúri Rajas, who are honoured by a festival every third year. Raja Dhám Dyau has a temple at Kanda in Sálam and there are several temples to Raja Brahm and Raja Dhám in parganah Páli. These two were the last independent Rajas of Katyúr. Their father died whilst they were still children and their mother Jiya appears to have been unable to teach them the duties of their position, for they grew up cruel, tyrranical and profligate. Hated by their subjects, they fell an easy prey to Bikramchand, who overran Katyúr and annexed it and Páli to the Chand possessions. A great battle was fought in which the brothers Dhám and Brahm and their sons Hari, Bhari, Súr, Sangrámi, Púr and Pratapi, with their servants, Bhíma Kathayat, Khekadás and Ujyáliya, perished and their bodies were thrown into the western Rámganga. These all became *bhúts* and are particularly reverenced in Páli and Katyúr. Haru being a Chand *Bhút* never enters a place where the Katyúris are, nor do the latter trouble a place already occupied by Haru.

Rúniya.

In the northern parganahs of Kumaon we have the malignant sprite Rúniya, who wanders from village to village on coursers formed of huge boulders and at night especially exercises his noisy steeds. He only attacks females and should any woman attract his attentions, she invariably wastes away, haunted by her hateful lover and joins him in the spirit land. Other sprites worshipped in these northern parganahs are Bálchan, who has a temple at Dor in Juhár; Kálchanbhausi, who has a temple at Toli in Dánpur and is much reverenced by the people of Dánpur and Pothing ; Naulo, who has temples at Jarkandár in Askot and at Bhatkot in Mahar ; Kálsain at Madkot in Juhár, Kapkot in Dánpur, Rái in Mahar and Jarkandár in Askot ; Chhurmal at Thán and Taili Hát in Katyúr, Dor in Juhár and

Jarkandár in Askot; Hari at Mensain in Juhár, Hushkar or Huvishka at Jarkandár and Dhárchúla in Askot and Kokarasi at Khabela in Khat Dasan of Jaunsár. In the lower Pattis besides those already noticed we have a temple to Nágdhana above Saurphatka in Sálam, one to Chharaunj Dyáu at Chharaunj in the same Patti, one to Vidyanáth Siddh at Chanoti in parganah Chhakbáta, whilst the Siddhs, Pándavas and Puris are similarly worshipped in Garhwál, and Salgaur in Jaunsár. The mountains and remarkable peaks are themselves sometimes an object of worship: thus we have at Chhipula-dhúra or pass by mount Chhipula a temple to the god of the mountain, and on the mountain itself some nine or ten pools in which the Askot people bathe at the great fair held on the Anant 14th. At Tolma, in the Níti valley, is a temple to the Himálaya as a whole and below Dunagiri in the same valley one to the same peak. Heaps of stones and wood called *kath-pattiya* are frequently seen on hills or at cross-roads; these are due to the offerings of travellers proceeding on a journey. The custom is said to have been established by the law-giver Yajnavalkya and when adding a stone to the heap the following invocation is made:—

"*Sákalya sthápitádevi Yajnabalkena pújitá*
Kásht páshán bhakshanti mama rakshán karotume."

"Thou goddess whose home is this ridge, worshipped by Yajnavalkya, eater of wood and stone, preserve me."

When a person has attended the funeral ceremonies of a relative and is about to return from the burning-ground, he takes a piece of the shroud worn by the deceased and hangs it on some tree near the ghát as an offering to the spirits which frequent such places. Another method of preventing the spirit of the deceased from giving any trouble is that a person of the funeral party when returning places a thorny bush in the road from the burning-ground wherever it is crossed by another path, and the nearest male relative of the deceased on seeing this puts a stone on it and pressing it down with his feet, prays the spirit of the deceased not to trouble them. The more malignant of the water-sprites or Gárdevis (from '*gár*,' a river) are those who represent persons who have met their death from suicide, violence or accident. These wherever they die, haunt the scene of their death and terrify the passers by, sometimes even following them home and taking possession of their houses. The

ghosts of bachelors of mature age who have died unmarried are known as Tolas and are met with in solitary desert places. The beings known generally under the names Bhút, Bhutani, Acheri, &c., are sometimes malignant and sometimes beneficent. The Acheri particularly favours those who wear red garments, and a scarlet thread around the throat is held to be a sure preventitive of colds and goitre. Traill writes:—"The optical illusions and shadows, seen in various mountainous countries, are also occasionally visible on some of the mountains in this province, which are accordingly celebrated as the peculiar resort of the Acheri, as the procession of elephants, horses, &c., which sometimes appear on the summits, are naturally ascribed to those ideal beings. A hill opposite to Srinagar is celebrated in this respect; the train of shadows which, from time to time, appears to move along its ridge, continues visible for some minutes, and is, in consequence, viewed by numbers of the inhabitants of the town. It is therefore certain that these shadows originate in physical causes, and are not created by the imagination of the individuals. The theory by which this illusion is explained in other places is particularly applicable here, as the shadows in question are invariably seen at the same hour, that is, when the sun is sinking below the horizon." In Jaunsár-Báwar, Dákini, who corresponds to the Tibetan Khahdoma, occupies a principal place amongst the sylvan malignant deities.

Sorcerers.

Sorcerers known as Bogsas or Bhoksas in Garhwál are supposed to have the same power of causing illness and injury as the Bhúts and Bhutanis. Some are even said to be able to assume the form of a wild animal and thus accomplish the destruction of an enemy. It is said that Sudarshan Sáh rid Garhwál of sorcerers in the following manner:—He called all the Bogsas together under pretence of needing their assistance in some ceremony and promised them all kinds of rewards should he succeed and so induced them to come themselves and bring all their books with them. When all were assembled that had any pretensions to power as sorcerers, he caused them to be bound hand and foot and thrown with their books and implements into the river and thus Garhwál was freed from their presence. Should a house or rock on the south overlook a house on the north and sickness arise in the latter, unless a public road or

stream intervenes, the evil influence of the former is said to have caused the illness (*bhed laga*) which can only be avoided by the removal of the obnoxious building or rock. This prejudice exists only with regard to objects in the southern quarter.

Bádi.

An account of the ceremony performed by Bádis or rope-dancers to bring prosperity on the villages to which they are attached is given in the *Bhagol Kurmáchal* and also in Traill's Report, from which latter the following extract is taken :—" Drought, want of fertility in the soil, murrain in cattle and other calamities incident to husbandry, are here invariably ascribed to the wrath of particular gods, to appease which recourse is had to various ceremonies. In the Kumaon district, offerings and singing and dancing are resorted to on such occasions. In Garhwál, the measures pursued with the same view are of a peculiar nature, deserving of more particular notice. In villages dedicated to the protection of Mahádeva propitiatory festivals are held in his honour. At these Bádis or rope-dancers are engaged to perform on the tight rope, and slide down an inclined rope stretched from the summit of a cliff to the valley beneath and made fast to posts driven into the ground. The Bádi sits astride on a wooden saddle, to which he is tied by thongs; the saddle is similarly secured to the *bast*, or sliding cable, along which it runs, by means of a deep groove; sand bags are tied to the Bádi's feet sufficient to secure his balance, and he is then after various ceremonies and the sacrifice of a kid, started off; the velocity of his descent is very great, and the saddle, however well greased, emits a volume of smoke throughout the greater part of his progress. The length and inclination of the *bast* necessarily vary with the nature of the cliff, but as the Bádi is remunerated at the rate of a rupee for every hundred cubits, hence termed a tola, a correct measurement always takes place: the longest *bast* which has fallen within my observation had twenty-one tola, or 2,100 cubits in length. From the precautions taken as above mentioned the only danger to be apprehended by the Bádi is from the breaking of the rope, to provide against which, the latter, commonly from one and a half to two inches in diameter, is made wholly by his own hand: the material used is the bhábar grass. Formerly if a Bádi fell to the ground in his course, he was immediately

despatched with a sword by the surrounding spectators, but this practice is now of course prohibited: no fatal accident has occurred from the performance of this ceremony since 1815, though it is probably celebrated at not less than fifty villages in each year. After the completion of the sliding, the *bast* or rope is cut up and distributed among the inhabitants of the village, who hang the pieces as charms at the eaves of their houses. The hair of the Bádi is also taken and preserved as possessing similar virtues. He being thus made the organ to obtain fertility for the lands of others, the Bádi is supposed to entail sterility on his own; and it is firmly believed, that no grain sown with his hand can ever vegetate." Each district has its heriditary Bádi, who is supported by annual contributions of grain from the inhabitants, and by remuneration for his performance at the occasional festivals in question.

Nága worship.

As might have been expected, we have numerous traces of Nága worship in these hills, but now chiefly connected with the special cult of Vishnu or Siva. In Kumaon, there are Vaishnava temples dedicated to Nág at Bastir in Mahar; to Kedár Kálinág, in Pungaraun: to Bini or Beni Nág, in Baraun; to Kárkotak Nág at Pandegaon in Chhakháta; to Vásuki Nág at Gadyára in Dánpur; to Nágdeo Padamgír at Dol in Sálam and to Nágnáth at Lodh in Borarau, at Thán in Katyúr, at Champáwat and in Dhyánirau. Siva has a temple as Nágeswar at Kotiya in Borárau and in Dehra Dún. In Garhwál we have Vaishnava temples to Seshnág at Pandukeswar; to Bhekul Nág at Ratgaon and to Sangal Nág at Talor, both in Pindarpár; to Bánpa Nág at Margaon in Painkhanda; to Lohandeu Nág at Jelam in the Níti valley and to Pushkara Nág at Kshetrpál Pokhri in Nágpur. Besides these, there are some sixty-five temples in Garhwál where Siva as Bhairava and Vishnu as Nágrája are conjointly worshipped with their Saktis. Siva has one separate temple as Nágeswar in Srinagar. The above enumeration clearly shows the importance of the non-Bráhmanical cults even to the present day and the curious blending of that element in the Vaishnava forms with the non-Bráhmanical element of the Saiva forms as Bhairava which is noticed elsewhere. Taken together we have over eighty temples in the two districts in which the various forms of Nágas are still an object of worship to the people. The Vishnu-

Purána[1] makes the Nágas, sons of the sage Kasyapa by Kadru, whose progeny "were a thousand, powerful, many-headed serpents of immeasurable might subject to Garura; the chief amongst whom were Sesha, Vásuki, Takshaka, Sankha, Sweta, Mahápadma, Kambala, Aswatara, Elápatra, Nága, Karkotaka, Dhananjaya and many other fierce and venomous serpents." The Váyu Purána, as noted by Wilson, names forty and other works contain many other names. Amongst the names given in the Vishnu Purána, the names of Sesha, Vásuki, Sankha or Sangal, Sweta, Nága, Karkotaka and Dhananjaya occur in these hills. The domestic worship of the Nág occurs on the Nág-panchami of 5th of the light half of Sráwan (August-September). For this purpose, a portion of the ground is freshly smeared with cow-dung and mud and the figures of five, seven or nine serpents are rudely drawn with sandal-wood powder or turmeric. To these offerings of flowers, sandal-wood, turmeric, parched rice or beans or powdered gram or *bájra* are made. Lamps are lighted and waved before them, incense is burned and food and fruit are placed before them. These observances take place both morning and evening and the night is spent in listening to stories in praise of the Nág. Occasionally a wandering Jogi brings a live serpent with him to which offerings are equally made and milk is given and milk is placed near holes in which snakes are known to live. The Nága *stotra* or hymn of praise is added to the evening *Sandhya*. It is said that Krishna is represented by Vásuki amongst the Sarpas and Ananta amongst the Nágas and that Sesha became Lakshmana in Rámá's time and Balaráma in Krishna's avatár. In the following account, the Mahásus are of Nága origin.

Mahásu.

In Jaunsár Báwar, there are four deities known collectively as the Mahásu debtas, Básak, Pibásak, Buthiya or Baitha and Chalta or Chalda. The first three abide in temples dedicated to them at Ranor in khat Báwar, at Tahnu in khat Pachgaon and at Anwar. The fourth or Chalta Máhásu took up his residence at Behrat in khat Kuru and moves from khat (sub-division) to khat as occasion arises. These deities came from Kashmír some four or five hundred years ago in this wise[2]:—Una Bhat lived in khat Mendrát and had a large family of

[1] Wilson, VII., 74: perhaps 'Nág,' with the meaning mountain, and 'Nága, a mountaineer, may help us to the original seat of this race. [2] From information locally procured for me by Mr. F. Fisher, C.S.

relatives and dependants. At this time, a demon named Kirbír Dána (Danava) made his appearance at the confluence of the Tons and Jumna near Kálsi and day by day eat some of Uná's people until only Una, his three sons and one daughter remained. Una fled to the forests of the Jumna and wandered about from place to place seeking means to destroy the demon and revenge the death of his relatives. One night the debta Mahásu appeared to him in a dream and said:—"Be of good cheer, O Una, proceed to Kashmír where the four Mahásus dwell and invoke their aid—they will destroy the demon, for no one else can." Una set out for Kashmír the next day and arrived at the place where the watchman of Mahásu lay fast asleep with two great iron clubs some hundred maunds in weight beside him. No one could approach Mahásu without the watchman's permission, so Una took up one of the clubs and placed it at the foot of the sleeping watchman, who soon awoke and demanded the name of the intruder and his business. Una at once answered:—"*Mamu*,[1] I am thy nephew." The watchman replied:—"*Bhái*, you are not my nephew, but as you have chosen to address me, what has brought you here?" Una told his story and the watchman dissuaded him from attempting the perilous journey, but finding Una resolved to proceed, gave him some rice and lentils and told him that he should first reach the forest of Ghagti and if troubled by storms, a handful of the rice and lentils sprinkled in the air would cause the storm to abate. He would next reach Kanani Tál or lake of Kananá, into which he was to spit and throw some of his hair. If his saliva turned into cowries and his hair into snakes, he would know that he was in the miracle-working land of Kashmír. There were but two dwellings in the great plain, one of the Mahásus and the other of Kelubír, an attendant and athlete. On Saturday he was to hide himself in Kelubír's house and about ten at night the four Mahásus might be seen arriving in palanquins and retiring to their house to rest. Early in the morning, the Mahásus went out to the sound of drums: first Básak to hold his court, then Pibásak, then Baitha and then Chalta. When the last came out Una should go to him and lay his case before him and be guided by his advice.

[1] Paternal uncle: hence the custom by which a person addresses another not related to him as *Mamu* exists to the present day in Jaunsar Báwar.

Una followed the instructions of the watchman and his petition was favourably received by the Mahásus, who eventually told him to return to his own country and they would destroy Kirbír. Chalta gave Una a handful of rice, an earthen vessel and his own staff, and told him that when hungry he need only strike the staff on the earth and water would come forth with which the rice might be prepared for food. This, too, would prove that Mahásu was with him, and if in addition when he arrived at Mendrát he threw some of the rice into the Tons, Kirbír could do him no harm. On the first Sunday after his arrival he should yoke an unbroken heifer to a plough and have it driven by an unmarried boy who had never before driven a plough and he would find that the plough would turn to gold and the share to silver. He should then plough five furrows, in each of which a stone image would be found representing the four Mahásus and their mother Deolári. Una on his return, did as directed and the images appeared in the furrows. Básak appeared first with his thigh transfixed by the ploughshare, then came Pibásak with a wound in his ear and then Baitha with his eye injured.[1] Chalta alone appeared sound and free, and hence the three first remain in the temples dedicated to them whilst Chalta is able to move about. Deolári, the mother, appeared in the fifth furrow and a temple to her name was erected in the field. Una worshipped the Mahásus and ordered his youngest son to serve them. He obeyed and became a Deopujári. The second son was directed to strike a gong and became a Rajput, whilst the third became a musician or Bajgi.[2] Then the Mahásus formed a garden (*gangári*) and filled it with narcissus plants from Kashmír to serve as offerings to them on festivals. Una then built houses for Kelu Bír, Kadásíri Bír, Sakrár Bír, and sixty-four other Bírs, who attended the Mahásus. The Mahásus then sought for Kirbír, but as he did not appear, Sakrár was sent to seize him, and was promised a loaf and a sweetmeat on every sankránt should he be successful. Kirbír still remained at large and Kelu Bír was then sent with a promise of four times the amount of offerings and that all goats sacrificed to the Mahásu should be killed at the door of his house.[3] Kelu killed Kirbír and hung up his head in Mahásu's temple.

[1] They are so represented in the temples.
[2] These names are borne by their descendants to the present day.
[3] These customs are still observed.

Básak and Pibásak took Garhwál,[1] as their share and Jaunsár-Báwar fell to Baitha and Chalta. The temples to the Mahásus in Jaunsár were built by the zamindárs long after Una's time. There are temples to Sangru at Mandhan in khat Koru and Udpalta, whence he is carried about khats Samalta, Udpalta, Koru and Seri. The temples of the Mahásus are now served by Sársúti Brahmans and the offerings consist of male kids, coin, rice, water and narcissus flowers.

Conclusions.

Notwithstanding the number and importance of the more orthodox forms of Vishnu and Siva in this portion of the Himálaya the non-Bráhmanical deities enumerated in the preceding pages have for more worshippers and are more constantly addressed. Amongst the peasantry of the high-lands the cult of Vishnu is little known and Siva is worshipped under the form Bhairava or the ling: but the common resort in times of trouble or distress is Goril, Chaumu, Haru and the other village gods. The truth is that popular religion in these hills is a worship of fear, and though Bhagwán is named as the great god, he is supposed to allow mischievous and malignant spirits to injure the person and property of the people. When famine and pestilence stalks abroad, the village temples are crowded and promises of oblations are made; if the evil be averted these promises are fulfilled, if not the deity is frequently abused and his shrine is neglected. The efforts of all are directed to appease the malevolence of these spirits who are supposed to lie in wait to take advantage of any error willingly or unwillingly committed. With the exception of the educated classes, perhaps, the great mass of the people of these hills are worshippers of unorthodox forms whose wrath is deprecated by offerings of male kids and young buffaloes. These are not presented as thank-offerings, but as the result of a compact that if such an event does or does not take place, the deity shall receive a certain reward; if the god fails in his part of the contract, he receives nothing. The ruder forms are always worshipped with bloody rites, and it is not yet forgotten that Káli in Gangoli received human sacrifices under the Chands. The ruder ritual has borrowed much from the Buddhist and Saiva Tantras, but is simpler than that in use in

[1] Temples exist at Bijoli and in Rawáin.

temples. We may fully endorse the opinion recorded by Mr. Monier Williams in one of his recent essays:—'The truth is that evil of all kinds, difficulties, dangers and disasters, famines, diseases, pestilences and death are thought by an ordinary Hindu to proceed from devils and from devils alone. And these malignant beings are held to possess varying degrees of rank, power and malevolence. Some aim at destroying the entire world and threaten the sovereignty of the gods themselves. Some delight in killing men, women and children, out of a mere thirst for human blood. Some take pleasure in tormenting, or revel in the infliction of sickness, injury and misfortune. All make it their business to mar the progress of good works and useful undertakings. I verily believe that the religion of the mass of the Hindus is simple demonolatry men and women of all classes, except perhaps those educated by ourselves, are perpetually penetrated with the idea that from the cradle to the grave they are being pursued and persecuted not only by destructive demons, but by simply mischievous images and spiteful goblins.' This, too, is the result of our examination of the popular religion in these hills.

Sikhs.

The Sikhs have temples of the followers of Guru Rám Rái at Dehra and Srinagar: at Pípali in Mawálsyun: Jaigaon in Ajmer and Gúm in Langúr served by Udásis. There is also a shrine of Guru Nának at Nánakmatha in the Tarái. The establishment at Dehra is the most important. Some account of the circumstances which led to the settlement of Guru Rám Rai at Dehra has already been given.[1] He took up his residence there about 1675 A. D., or according to local tradition in 1686. Fateh Sáh, Raja of Garhwál, bestowed several villages in *jágír* on the Guru and also erected and endowed a *math* at Srinagar still in the possession of Udási fakirs of the Sikh sect. Amongst the many marvellous stories told of Rám Rái, the following may be mentioned:—A disciple was absent at sea and in danger of shipwreck called on the Guru for his aid and the Guru at once lay down upon his couch and directing his wife Panjáb Kuar not to disturb his body for three days, set out in the form of a fly and saved his disciple from shipwreck. His followers at Dehra, however, believing him to be dead, notwithstanding

[1] P. 531.

the remonstrances of Panjáb Kuar burned the body before the expiration of the three days. When the Guru returned in the form of a fly there was no body to enter and he cursed his followers, saying, 'O ye ungrateful disciples, as ye have disobeyed my orders and burned my body to ashes prematurely, henceforward your bodies also shall be burned.' Hence cremation is practised by his sect, and every year at the great festival the Guru appears as a fly to his followers. Panjáb Kuar continued the plan of the temple begun by Rám Rái and completed it in 1706 A.D. To her is also due the aqueduct[1] from Rajpur and the Khúrbura-tírth or fair. There are two great assemblies: one on the 5th of Chait (March-April) and another on the 8th of Bhádon (August-September), chiefly attended by Sikhs from the Panjáb. The Mahant goes out to meet them towards the Jumna and they come in procession with music and dancing and present their offerings. They then proceed to the Kánwali garden and are regaled with sweetmeats provided by the temple officials, and thence to the place where the standard of the Guru is placed, to which obeisance is made. They then proceed to the temple and march three times around it before entering and offering their presents, after which the Mahant provides them with food and lodging for the night. The next day the pilgrims bathe and a party proceeds to the Siddh-ban and cut down a new pole for the Guru's standard, which after being bathed in Ganges water is set up in place of the old one with great ceremony. Offerings are again presented and the Mahant distributes yellow turbans and all day and night Udásis chaunt the great deeds of Rám Rái in the temple. The offerings are collected and placed in the treasury to defray the expenses of the establishment and the maintenance of the pilgrim rest-houses. The fair held in August is intended to commemorate the death of Rám Rái and fragments of the offerings made are sent to his followers in all parts of India. The wives of Rám Rái are buried one at each corner of the building and their place of sepulture is now marked by four towers. The present Mahant Náráyan Dás is eighth in descent from Rám Rái. His duty is to burn incense in the temple, present the offerings, superintend the receipts

[1] Repaired and made of masonry by the British. Panjáb Kuar also excavated the tank at Khúrbura, where a bathing festival takes place in September and January.

and expenditure and direct the ceremonies to be observed on particular days.

The Jainas have a temple to Parasnáth and the Musalmáns a shrine (*takiya*) to Sháh Pir Káki at Srinagar and small mosques at Dehra, Almora, and Naini Tál and several places along the foot of the hills, but neither are of any account amongst the hill populations. There are Christian Churches in Dehra Dún, Chakráta, Mussoorée, Páori, Almora, Pithoragarh, Lohaghát, Ránikhet, and Naini Tál, but many of these are chiefly intended for the use of British troops.

CHAPTER X.

RELIGION—(*contd.*)

CONTENTS.

THE Kumaon calendar. Solar year. Luni-solar year. Festivals governed by the luni-solar year in Chait, Baisákh, Jeth, Asárh, Saun, Bhado. *Nág-panchami. Sréddh-paksh* of Asoj. *Asoj naurátri.* Kárttik. Mangsír. Pús. Mán. Phágun. Shiurátri. Festival at Jagesar. Gosains. Jangamas. Kánphatas. Sákti ceremonial. Sacrifices. Holi. Festivals regulated by the solar year and held at each *Sankránt.* Mín. Bikh. Kark. *Bagwáli.* Sinha. Makar. Domestic ritual. Introductory. Daily worship. Invocation of blessing. Worship of Ganesha. Invitation, throne, &c. Worship of the Mátris. The joyful ceremonies for ancestors. Consecration of the water vessel. Tying on the amulet. On the birth of a son. Worship of Shashthi. Naming a boy. Birth-days. Piercing the ear. The nine planets: their worship and ritual. Shaving the head. Becoming a religious student. Saluting the preceptor. Marriage. First visit. The marriage ceremony. The second visit. The *Arka* marriage. The *Kumbh* marriage. Other ceremonies for special occasions. Rites for those born in the *Múla* or *Aslesha* lunar-mansions Funeral ceremonies.

The Kumaon calendar.

Before proceeding with a description of the religious festivals observed in Kumaon, it appears desirable to offer some explanation of the calendar in use, for the success or otherwise of many ceremonies is formally stated to depend upon the correct calculation of the auspicious *tithi* chosen for its celebration. There are two modes of computing time[1] in common use, one founded on the sidereal divisions of the months and the other on an intricate adjustment of the solar to the lunar year. The astronomical solar year is determined by the period between two consecutive conjunctions of the sun with the *Yogatára* star of Aswini (*B. Arietis*), the first asterism of the constellation Aries, and each month commences when the sun enters a new constellation[2]

Solar year.

[1] See further Thomas's Prinsep, II., 148: Wilson, II., 151; VII., 284: Calcutta Review, I., 257; XIII., 65.

[2] This is not a sign of the zodiac as understood by Europeans.

(*sankránt*). The following table gives the names of the seasons, months and constellations:—

Seasons.	Months.		Constellations.	
	In Sanskrit.	In local dialect.	Sanskrit.	Local names.
1. Vasanta ...	1. Chaitra ..	1 Chait.	12. Mína ...	Mín, Halduwa.
	2. Vaisákha ...	2. Baisákh.	1. Mesha ..	Mekh, Vikhupadi, Vikhoti, Vikhbati, Vikh.
2. Grishma	3. Jyeshtha ...	3. Jeth.	2. Vrisha...	Brish Brikh.
	4. Ashádha ...	4 Asárh.	3. Mithuna,	Mithun.
3. Varsha ...	5. Srávana ...	5. Shaun, Shrában	4. Karkata,	Kark, Hariyálo, Halyáva.
	6. Bhádra ...	6. Bhado.	5. Sinha ...	Sinh, Ghi, Walgiya.
4. Sarada ...	7. Aswina ...	7. Asoj.	6. Kanya ...	Kanya, Khataruwa.
	8. Kárttika ...	8. Kárttik.	7. Tula .	Tulapati.
5. Hemanto ...	9. Márgasiras or Agrahávana.	9. Mangsir.	8. Vrishika	Brishik.
	10. Paushs ..	10. Pús.	9. Dhanus,	Dhan, Dhanush.
6. Sirisa ...	11. Mágha ...	11. Mán.	10. Makara,	Makar, Uttaráyini, Phúl, Ghúgutiya.
	12. Phálguna ...	12. Phágun.	11. Kumbha,	Kumbh.

The true sidereal day is the time between the same point of the ecliptic rising twice; and is therefore equal throughout the year. This division is commonly used and is sub-divided into sixty *gharis* of sixty *palas* each, so that each *ghari* is equivalent to nearly twenty-four minutes. Each month contains as many days or parts of days as the sun continues in each constellation. The civil year rejects the fractions of a day: thus if the sun enters the first point of Aries at or after midnight of the 12th April a day is to be added to the expiring year, or if the sun enter on the morning of the 12th that day is rejected from the year. Each civil month commences at sunrise on the first day of the month, and not at the actual entrance of the sun into the constellation of the month. If the fraction exceeds thirty *gharis* (half a sidereal day), then the civil month is considered to begin one day later than the astronomical month. The length of the months is also affected by the difference of time calculated for the passage of the sun through the northern and southern degrees of the ecliptic, which in effect brings about a bissextile year of 366 days as nearly as possible once in four years. In Kumaon the months are doubly

irregular[1]: with us June has always thirty days and July thirty-one days, but in Kumaon Asárh may have one year thirty-one days and the next year thirty-two days, for the sun may enter a constellation at any hour in the twenty-four, whilst the day always commences from sunrise. In 1878, the first day of the solar year fell on March 12th. The eras of the Káli *yug*, Saka *san*- and Nepál *san* follow the solar year. The Saka year began on the 14th March, 1878 A.D., Julian style.

The luni-solar year.

The Hindu luni-solar year resembles in a great measure the system of recording time in use in ancient Greece. The ordinary year, called *samvatsara*, is divided into twelve lunar months, an intercalary month being supplied about once in every three years. The Greeks had a cycle of eight years in which there were three intercalary months, always inserted after the month Poseidon. The Hindu year commences at the true instant of the conjunction of the sun and moon; that is, on the new moon which immediately precedes the commencement of the solar year, falling, therefore, somewhere in Chait. The day of conjunction is the last day of the expired month, the first of the new month being the day after conjunction. In Upper India, following the *Súrya Siddhánta*, the month commences with the full moon (*purnima*) preceding the last conjunction; so that New year's day always falls in the middle of the lunar month Chait and the year begins with the *sudi* or light-half of that month. Thus the first day of the Samvat year 1935 fell on Chait Sudi 1st or April 3rd, 1878, corresponding to the 23rd of Chait of the solar year. The lunar months are always named after the solar months within which the conjunction happens, so that when two new months fall within one solar month (for example on the first and thirtieth days), the name of the corresponding solar month is repeated, the year being then intercalary or containing thirteen months. The intercalated or added (*adhika*) month takes its place in the middle of the natural (*nija*) month, so that of the four fortnights, the first and last belong to the natural month. In the Greek system, a month was omitted on each 160th year, similarly in the Hindu system it happens that in each period of 160

[1] In the year 1878, the number of days in each month was as follow:—Chait, 31: Baisákh, 31: Jeth, 31: Asárh, 32: Shaun, 31: Bhado, 31: Asoj, 31: Kárttik, 30: Mangsir, 29: Pús, 29: Mán, 30: Phágun, 29.

years there is a month which has no full moon and is therefore expunged, but it also happens that in the same year there is also an intercalary month. Prinsep writes:—"The lunar month, whatever be its civil duration, is divided into thirty *tithis* or lunar days which are subject to similar rules regarding intercalation and omission. When two *tithis* end in the same solar day, the intermediate one is struck out of the calendar and called a *ksháya-tithi*: when no *tithi* begins or ends in a solar day, the *tithi* is repeated on two successive solar days and the first is called *adhika*. When a *tithi* begins before or at sunrise, it belongs to the solar day at or about to begin: when after sunrise it is coupled with the next solar day, provided it does not end on the same day, in which case it would be expunged from the column of *tithis*. To render this singular mode of computation more perplexing, although the *tithis* are computed according to apparent time, yet they are registered in civil time. It is usual, however, to make account of the days in the semi-lunar periods by the common civil reckoning, beginning (as with the years) after the completion of each diurnal period. Thus the day on which the full moon occurs is the *sudi* 14th or 15th or the last day of the light-half and following is the first of the *badi* or dark-half." A *tithi* is expunged, on an average, once in sixty-four days, so that five or six *tithis* are omitted in a year; one *tithi* is equal to 0·984 of a day or sixty-four *tithis* make sixty-three days nearly. The principal era to which the luni-solar year is adapted is that of Vikramáditya: it is also used in calculating nativities, moveable festivals and in most orthodox religious observances. In 1878, the beginning of the year fell on the 3rd of April. In some calendars that I have met with the months begin with the light half and end with the dark half all through, so that the day after the full moon of Chait would be the first day of the dark half of the same month, but the usual practice is to make it the first day of the dark half of Baisákh.

The general use of the Saka era in Kumaon shows that it is the older of the two amongst the native Khasiya population, though now ousted from its position in orthodox religious observances. Chait is considered the first month of the year in Kumaon and Baisákh in the plains: thus New Year's day falls on the first of Chait, though in the almanacs as a rule the 23rd Chait is the first

day entered. The names of the months are like those in the plains' system except that September is called Asoj in Kumaon instead of Asan or Kuár and November is called Mangsír instead of Aghan. The differences that have arisen between the Hindu mode of solar reckoning and that of the Romans is due to the precession of the equinoxes not having been understood by the Hindus. The initial moment of the year was placed in former times on the vernal equinox or point of intersection of the equatorial and equinoctial lines. This point varies about 50″ every year, so that as a sign of the zodiac contains 30°, the vernal equinox passes through a sign in 2,160 years. In the earliest ages known to us the vernal equinox was in Taurus, then in Aries and it is now in Pisces. In the Káli year 3000 or 499 A. D., the vernal equinox coincided, according to Hindus, with the beginning of Aswini and the European year began on the vernal equinox on the 20th March. Since then Europeans have arbitrarily changed the beginning of the year to the 1st of January, a day of no particular solar, lunar or sidereal importance. The Kumaonis also have abandoned the vernal equinox and have made the conjunction of the sun with *B. Arietis* their starting-point. Even in this matter they are in error, for as a matter of fact the conjunction does not take place on the day assumed for it in their tables. The vernal equinox is removed from the first of Baisákh by a period of about twenty-two days and the moment of ecliptic conjunction of the sun with *B. Arietis* is about seven days in advance of the date assigned to it. For all practical purposes, the rules given by Prinsep[1] for ascertaining the day in a Hindu solar year or the Christian date corresponding to a date in a Hindu luni-solar year will be found quite sufficient. In the following account of the religious festivals in Kumaon we shall note those which are regulated by the solar calendar separately from those which follow the luni-solar calendar and commence with the month of Chait.

Chait.

The eleventh of the dark half of Chait is known as the *Pápmochani ekadasi* and is observed by those who keep the elevenths of every month sacred. The first nine nights of the *sudi* or light half of Chait are known as the Chait *naurátri* and are sacred to the worship of the

[1] Useful tables, pp. 155, 177, 186.

Sákti form of Siva as Nau Durga, the nine forms of Durga. These are in common acceptation here :—Sailaputri, Brahmachárini, Chandraghanta, Kushmánda, Skandamáta, Kátyáyini, Kálrátri, Mahágauri and Siddhrátri. Durga is also worshipped under her other forms as Káli, Chandika, &c., at this season. Those who eat flesh, sacrifice kids to the goddess, using the Nirriti name in the presentation, and those who do not eat flesh offer grain and flowers and use the name of one of the milder forms in the consecration. On the ninth of Chait *sudi* known as the *Rámnaumi*, festivals are held at the temples of the Vaishnava form Rámapádak in Almora, Uliyagaon and Másí. The Chait *naurátri* is also the season of the great *sangat* or fair at the temples of Guru Rám Ráí in Dehra and Srinagar. The eleventh of the light half is known as *kámada* when widows worship Vishnu and offer grain, fruit and flowers to the deity either in a temple or to a *salagrám* stone in their own home. The day of the full moon is observed as a festival in the temple of Akásbhájini in Saun. On this day also the houses of the pious are freshly plastered with a mixture of earth and cow-dung and no animal is yoked: hence the name *Ajota*.

Baisákh.

The eleventh of the dark half of Baisákh is known as the *Barathini ekadasi* and is observed by widows like the *kámada* of the light half of Chait. The third of the light half is called the *Akshai* or *Akhai tritiya* and no one ploughs on that day lest some misfortune might occur. The Sikhs call it the *Sattwa-tíj* and observe it as a festival. The *Ganga-saptami* or seventh devoted to the river Ganges is marked by special services in several places along the Ganges. The observances prescribed for the *Mohani-ekadasi*, or eleventh styled *Mohani*, are seldom carried out in Kumaon except by those who, having suffered much in this life, are desirous of obtaining a better position at their next birth. Old men and women amongst the poorer classes worship Vishnu on this day. The fourteenth of the light half is known as the *Nar-Sinha chaturdasi* which is observed in the Vaishnava temples. The day of the full moon called the *Mádho purnima* is also held sacred and assemblies are held at several of the Saiva and Nága temples on this day, such as Pinákeswar, Gananáth, Bhairava in Phaldakot, Bhagoti in Dhaundyalsyún and Síteswar, also at Vásuki Nág in Dánpur and Nágdeo in Sálam.

Jeth.

The eleventh of the dark half of Jeth is called the *Apara ekadasi* or 'super-excellent eleventh,' the best of all the elevenths of the dark half which are held sacred by the pious. No noted fair takes place on this day and it is merely a nominal festival in these hills. The last day of the dark half is called *Bat-sávitri amáwas*, when Sávitri, the personified form of the sacred *Gáyatri* verse, is worshipped by a few. The second of the light half of Jeth is known as the *Anadhya dwitiya*, and on this day no new task is given by a teacher to his pupils. The tenth of the light half is called the Jeth *Dasahra*, which is generally observed throughout the lower pattis. Special assemblies are held on this day at the temples of Uma at Karnprayág, Uparde at Amel, Bágeswar, Koteswar and Síta at Sítabani in Kota, &c. This Dasahra fell on the 10th June, 1878, and marks the birth of Ganga, the worship of the Nágas and Mánasa. The eleventh is called the *Nirjalá ekadasi*, when drinking water is forbidden to those who profess to be devout. The day of the full moon is like all other similar dates observed by plastering the floor with cow-dung and earth and giving presents (*nishrau* or *nirshau*) of rice and money to Brahmans.

Asárh.

The eleventh of the dark half of Asárh is known as the *Yogini ekadasi*, a nominal feast only observed by those who have vowed to keep holy every eleventh throughout the year. During this month festivals are held in the temples dedicated to Bhairava and Nágrája in Garhwál. The eleventh of the light half of Asárh is known as the *Harisayani ekadasi*, the day when Vishnu falls asleep, which like the *Haribodhini ekadasi*, or eleventh of the light half of Kárttik, when Vishnu awakes from his sleep, is esteemed specially sacred amongst 'elevenths' and is generally observed throughout these districts. The day of the full moon is observed in the same way as in Jeth as a domestic festival.

Sáwan or Saun.

The eleventh of the dark half of Sáwan or Saun has the local name *kamika*, but is merely observed as a day of rest and one of the *ajota* days when the cattle are not harnessed. When the thirteenth of any month falls on a Saturday it is called *Sani triyodasi* and is held sacred to Siva, no matter in what month or in what half of the month it

takes place. This conjunction occurred on the 27th July, 1878. Similarly, when the last day of the dark half of the month occurs on a Monday, it is called the *somwáti amáwas*, which is generally observed as a day of rest and the *sráddh* of ancestors is performed without, however, making the *pindas* as prescribed for the *Sráddh-paksh* of Bhado. On this day also an iron anklet called *dhagul* is worn by children to guard them against the evil eye and the attentions of bhúts or sprites. This conjunction took place on the 29th July and 23rd December, 1878. The eleventh of the light half is known as the *Putrda ekadasi*, but has no special importance. On the day of the full moon, after bathing in the morning, Hindus retire to some place near running water and making a mixture of cow-dung and the earth in which the *tulsi* plant has grown, anoint their bodies; they then wash themselves, change their sacrificial threads and perform the ceremony of *Rikh-tarpan* or worship of the seven Rishis or sages. They then bind *rákhis* or bracelets of silk or common thread around their wrists and feed and give presents to Brahmans. The common name for this festival in Kumaon is *Upa-karma*, equivalent to the *salauna* or *Rakshábandhan* or *Rákhibandan* of other districts. On this day festivals take place at the Sun temple in Súi, Bisang, Bárahi Devi at Devi Dhura and Patuwa in Súi. A commercial fair takes place at Devi Dhúra on the *Sudi purnima*.

Bhado.

The fourth of the dark half of Bhado is known as the *Sankashi chaturthi* when Ganesh is worshipped and offerings of *dúb* grass and the sweetmeat called *ladu* composed of sugar and sesamum seed are made. These sweetmeats are here called *modak*, of which ten are usually presented, and of these five belong to the officiating priest and five to the worshipper. This observance is common amongst all Hindus. The eighth of the dark half is the well-known *Janamashtami*, a great festival amongst the Vaishnavas, held in honour of the birth of Krishna. The eve of this festival is spent in worship in the temples: it fell on the night of the 20th of August in 1878. Local festivals are also held during this month in honour of Kelu Pír, Ganganáth, Kárttikeya, Dipa Devi and Pushkar Nág. The eleventh of the dark half is known as the *Ajámbika ekadasi* and that last day is called the *Kusháwarthi amáwas*, when the *kusha*

grass is collected by Brahmans for use in their ceremonies. Locally amongst the Tiwári Brahmans the ceremony of changing the sacrificial thread is performed on the third of the light half of Bhado, which is commonly known as the *Haritáli tritiya* from the Hasta *nakshatra* or asterism. The fourth is known as the *Ganesh-chaturthi* and is the date of a fair at Thal Kedár in Waldiya and at Dhvajpatikeswar near Jarkandár in Askot. The fifth, which fell on the first day of September, 1878, is known as the *Nág* or *Rikhi* or *Birura-panchami*. This is the great day on which the serpents are worshipped and the date of the fair in honour of Agyára Mahárudra at Papoli in Nákura and Karkotak Nág in Chhakháta. Rikheswar is a title of Siva as lord of the Nágas, a form in which he is represented as surrounded by serpents and crowned with a chaplet of hooded snakes. The people paint figures of serpents and birds on the walls of their houses and seven days before this feast steep a mixture of wheat, gram and a sort of pulse called *gahat* (*Dolichos uniflorus*) in water. On the morning of the *Nág-panchami* they take a wisp of grass and tying it up in the form of a snake dip it in the water in which the grain has been steeped (*birura*) and place it with money and sweetmeats as an offering before the serpents.

Nág-panchami.

The chief festival, however, in Bhado is that held on the *Nand-ashtami* or eighth of the *Sudi* or light half. It is popular all over the upper pattis of the two districts and is the occasion of a great assembly in Almora. This fair fell on the 4th September, 1878. Great numbers of kids are sacrificed and occasionally young male buffaloes. At Almora a young buffalo is sacrificed and Raja Bhím Singh, the representative of the Chand Rajas, gives the first blow with a talwar and afterwards the others kill the animal. In several villages this is made the occasion of a cruel custom. The animal is fed for the preceding day on a mixture of *dál* and rice and on the day of the sacrifice is allowed sweetmeats and, decked with a garland around its neck, is worshipped. The headman of the village then lays a talwar across its neck and the beast is let loose, when all proceed to chase it and pelt it with stones and hack it with knives until it dies. This custom especially prevails in villages where the form Mahikh-murdani is worshipped,

'she who slew the buffalo-demon Mahisha.' A similar custom, however, called *dhurangi* obtains in the Bhotiya parganahs of Kumaon where there is no trace of the buffalo-legend. There, when a man dies, his relatives assemble at the end of the year in which the death occurred and the nearest male relative dances naked with a drawn sword to the music of a drum, in which he is assisted by others for a whole day and night. The following day a buffalo is brought and made intoxicated with bhang and spirits and beaten with stones, sticks and weapons until it dies. It is probable that this custom of slaying the buffalo is an old one unconnected with any Bráhmanical deity. A story fabricated not very long ago in connection with the Nanda temple at Almora is both amusing and instructive as to the growth of these legends. My informant tells how the worship of Nanda at Almora had been kept up ever since it was established there by Kalyán Chand, but that when the British took possession of Kumaon, the revenue-free villages attached to the temple were sequestrated by Mr. Traill.[1] Three years afterwards (1818) Mr. Traill was on a visit to the Bhotiya valley of Juhár, and whilst passing by Nanda-kot, where Nanda Devi is supposed to hold her court, was struck blind by the dazzling colour of the snow. The people all told him that unless the worship of the goddess were restored his temporary snow-blindness would remain for ever, and on his promising to this effect, his eyes were opened and healed. In Almora, there is this peculiarity in the worship of Nanda, that two images are made of the stock of the plantain tree and on the morrow of the festival, these are thrown or, as the people say, sent to sleep on a waste space below the fort of Lalmandi (Fort Moira) and thus disposed of.

Durbáshtami.

A ceremony known as the *Durbáshtami* sometimes take place on the *Nandáshtami* and sometimes on the *Janmáshtami* or other holy eighth of this month. On this day women make a necklace of *dúb* grass which they place around their neck and after ablution and worship give it with the *sankalp* or invocation and a present to Brahmans. They then wear instead a necklace of silk or fine thread according to their means. They also put on their left arms a bracelet of

[1] On the British conquest in 1815, all claims to hold land free of revenue were examined and in many cases, owing to the difficulty of obtaining satisfactory evidence in support of the claim, considerable delay arose in issuing orders.

thread with seven knots known as *dor*. Men wear a similar bracelet of fourteen knots on their right arms which is called *anant*, as they first wear it on the *anant chaturdasi* or fourteenth of the light half, which is further observed as a festival at Beninág in Baraun, Bhagling in Sor and Chhipula in Askot and also at the temples to Ghantakarn in Garhwal. The eleventh is locally known as the *Párshvaparí ekadasi* and the twelfth as the Báman or *Shrávan dwádasi* from the Srávana *nakshatra* or asterism, but both are merely nominal festivals. The day of the full moon is observed as in other months.

Sráddh-paksh of Asoj.

The entire dark half of Asoj is known as the *sráddh-paksh* or fortnight devoted to the repose of the manes of ancestors. It is also called the *Mahálaya párban sráddh* from the formula used each day in worshipping the manes. The ninth is known as the *Sráddhiya naumi* when the ceremonies are performed for a mother. On this day, the children by a legal wife make small balls of cooked rice and the children by a concubine make the same of raw rice ground with water on a stone. These cakes or balls are called *pinda* and are worshipped in remembrance of the deceased. They are then given to a cow to eat or are thrown into a river or on to some secluded waste piece of ground. The practice of making *pinda* of boiled rice is, however, confined to those castes who claim connection with similar castes in the plains and is unknown amongst the Khasiyas, who make the *pinda* of raw rice as already noticed for the offspring of a concubine. If a father has died his *sráddh* is performed on the same date of the fortnight: thus if he died on the third of Magh *sudi*, his *sráddh* in the *sráddh-paksh* or *kanyagat* will be held on the third, but if he died on the ninth or any succeeding date, if the mother be already dead, as a father's *sráddh* cannot be held after a mother's, the ceremony must be observed on the eighth. In addition to this the anniversary of the death of a father is always separately observed by the better classes and is called '*ekodhisht*' or '*ekodrisht*,' when 'he alone is looked at' or is made the object of worship. If he died during the *sráddh-paksh*, the day is called '*ekodrisht khyá sráddh*,' and though it falls on the ninth or succeeding day is observed as the anniversary. The last day of the dark half is called *Amáwas*

sráddhiya, when the names of all ancestors are mentioned and worshipped, but *pindas* are made and offered only for the three male paternal ancestors, father, grand-father and great-grand-father. The three ascending cognates and agnates are all honoured on this day, which is the only one observed by Doms. The *sráddh* of girls who die before marriage is never made, and of boys only if they have been invested with the sacrificial thread. The *sráddh* of a girl who has married is made by her husband's brother's family, if she dies childless her husband's brother's son, or if her husband has married twice and has offspring, her step-son (*sautela*) performs the ceremony. In default of these, the elder or other brother of the husband will officiate; her own brothers never can take part in any ceremony connected with a sister who married. The eleventh of the *sráddh-paksh* is known as the *Indriya ekádasi*, but has no particular observances attached to it apparently.

Asoj *sudi*.

The first nine nights of the light half of Asoj called the *Asoj naurátri* are, like the first nine nights of Chait, specially devoted to the worship of Sakti. The first day is called *Devi sthapana*, on which the idol is set up and the preparations are made. The eighth is the '*mahá-shtami*' or great eighth, when the pious fast all day and make ready for the great or last day, when kids are sacrificed and the proceedings continue during the whole night. The tenth of the light half of Asoj is here called the *Bijayadasami* or the tenth of victory, and on this day a festival is held to commemorate the commencement of Rámá's expedition to Ceylon (Lanka) for the release of Sita. It is locally known as *Páyata* or simply *Pcit*, from the well-known sweetmeat *petha* which forms an important item of the feast given to friends and relatives on this day. Some also now pay honour to the young green sprouts of the more useful crops, such as wheat, gram, mustard, as well as on the *kark sankránt*, when the custom is universally observed. The village gods Goril and Ghatku or Ghatotkacha have festivals on the *mahashtami*. The eleventh is known as the *Pápánkusha ekádasa* or eleventh of the *ankus* (elephant goad) of sin, and in some copies as *Párshvapari*. The day of the full moon is called *Kojágri*, and from this day the gambling of the Dewáli commences.

Kárttik.

The eleventh of the dark half of Kárttik is known as the *Ráma ekadasi* or eleventh of Ráma and Lakshmi. The entire dark half is called the *Dipa-paksh* or 'fortnight of lamps.' The Pádma-Purána alludes to the eleventh or Ráma as appropriate to the gift of lighted lamps as well as to the *Nark chaturdasi* or fourteenth and fifteenth. The thirteenth is set apart for the gift of lamps to Yama, and flowers should be offered on the two following days, when bathing also is enjoined. The *Dipáwali amáwas* or last day of the dark half fell on the 25th October, 1878, and is known as the *Sukhrátri* or happy night which Vishnu passed in dalliance with Lakshmi and also as the *Diwáli*. Women take part in the observances of the night and some keep the previous day as a fast and devoutly prepare the materials for the night's worship when none are allowed to sleep. Even the lighting of lamps for the purpose of gambling in any place dedicated to Vishnu is considered to be a pious and meritorious act at this season. The Vaishnava friars known generically as Bairágis minister at most of the Vaishnava shrines and festivals and acknowledge the spritual supremacy of the chief of the Sriranga temple and *math* near Trichinopoly in the Madras Presidency.

The *Kárttika Máhátmya* of the Pádma-Purána is devoted to a description of the rites and ceremonies to be observed during Kárttik. "In this month whatever gifts are made, whatever observances are practised, if they be in honour of Vishnu, are sure of obtaining the end desired and realizing an imperishable reward." The first day of the light half is devoted to the memory of the Daitya Raja Bali who was subdued by Vishnu in his dwarf incarnation and to Krishna or Kanhaiya as Gobardhan. When Bali was sent to Pátála, he was allowed as a boon to have this day held sacred in his honour. The door-step is smeared with cow-dung and the images of Bali and his family are rudely drawn thereon and receive domestic worship. The second is known as the *Yama-durtiya* when Yama came down to visit his sister Yamuna and she received the boon that all brothers who visited sisters on that day and interchanged presents should escape hell. On the eighth a commercial fair is held at Askot. The ninth is known as the *Kushmánda-naumi* when pumpkins are offered to Devi, and on the

eleventh called the *Haribodini*, the waking of Vishnu from his periodical slumbers, is celebrated. The fourteenth is known as the *Vaikunth-chaturdasi*, for he who dies on this day goes straight to the paradise of Vishnu. Noted festivals are held on the Vaikunth fourteenth at Kamaleswar in Srinagar and Mallik Arjun in Askot. The last day of the light half or *purnima* is like the *purnima* of Baisákh, a great day for bathing, and special assemblies are then held at the temples of Pinákeswar, Gananáth, Síteswar, Vásuki Ráj and Nágdeo Padamgír.

Mangsír.

The eleventh of the dark half of Mangsír is known as the *Utpatti ekadasi*, but is not particularly observed. The eleventh of the light half is called the *Moksha ekadasi* and has some local celebrity. The twelfth or *Báráhi dwádasi* is so called in remembrance of Vishnu's boar incarnation. The day of the full moon has no peculiar observance attached to it. The only other festivals during this month are those held at the harvest feasts. No important agricultural operation takes place without the intervention of some religious observance. An astrologer is called in who fixes the auspicious day, generally with reference to the initial letter of the name of the owner of the field, but if this does not suit, his brother or some near relation whose name is more convenient for the purpose takes the owner's place in the ceremony. Tuesdays and Saturdays are generally considered unlucky days. On the day fixed for the commencement of ploughing the ceremonies known as *kudkhyo* and *halkhyo* take place. The *kudkhyo* takes place in the morning or evening and begins by lighting a lamp before the household deity and offering rice, flowers and balls made of turmeric, borax and lemon-juice called *pitya*. The conch is then sounded and the owner of the field or relative whose lucky day it is takes three or four pounds of seed from a basin and carries it to the edge of the field prepared for its reception. He then scrapes a portion of the earth with a *kutala* (whence the name *kudkhyo*) and sows a portion. One to five lamps are then placed on the ground and the surplus seed is given away. At the *halkhyo* ceremony, the *pitya* are placed on the ploughman, plough and plough-cattle and four or five furrows are ploughed and sown and the farm-servants are fed. The beginning of the harvest is celebrated by

the *kalái* when ten or twelve ears of the new grain are brought from the fields and offered to the household deity. Pots of cow-dung are placed over the doorway and near the household deity and four ears crossed two by two are placed in them. After the harvest is over one or two *supas* or sieves of grain are distributed amongst the servants. All these ceremonies are accompanied by simple prayer for prosperity in general and on the work about to be performed in particular.

Pús. The eleventh of the dark half of Pús is called the *Saphala ekádasi* and the eleventh of the light half is known as the *Bhojni ekádasi*. The fourth of the dark of half of Mán or Mágh is known as the *Sankasht chaturthi*, which like the similarly named day in Bhado is sacred to Ganesh. The eleventh is the *Shat-tila ekádasi* when the devout are allowed but six grains of sesamum seed as food for the whole day. The first of the light half fell on the 23rd of February in 1879. The fifth of the light half called the *Sri* or *Basant-panchami* marks in popular use the commencement of the season of the Holi. The name '*Sri*' is derived from one of the titles of Lakshmi, the goddess of wealth and prosperity, and according to some includes Sarasvati, the goddess of learning. Even in Kumaon where the customs and ideas of the plains have not yet thoroughly permeated the masses, amongst some classes, young children beginning to learn are taught to honour Sarasvati on this day, whilst the Baniya worships his scales, the soldier his weapon, the clerk his pen, the ploughman his plough and others the principal emblem of their professions or callings. The name *Basant-panchami* connects the festival with the advent of spring and the young shoots of barley, at this time a few inches in length, are taken up and worn in the head-dress. The *Basant-panchami* corresponds closely with the old Latin feast, the fifth of the ides of February which was fixed as the beginning of spring in the Roman calendar. On this day, people wear clothes of a yellow colour in honour of spring and indulge in feasts and visiting their friends. From the fourth to the eighth of the light half of Mágh festivals are held which are known collectively as the *Panch parbb*: they are the *Ganesh chaturthi*, the *Basant-panchami*, the *Súrya shashthi* or *khashthi*, the *Achala saptami*

Mán.

and the *Bhíshmáshtami.* The *Ganesh chaturthi* is observed by few in Kumaon, but the *Basant-panchami* is held in honour all over the two districts. The *Súrya shashthi* is held on the same day as the *Sítala shashthi* of the plains, but has no connection with it. Here it is observed by the Sauras only or occasionally old widows and others similarly situated who worship the sun on this day. The only noted festival in connection with it is that at the temple of the sun at Paban or Paḷhain in Bel. The *Achala saptami* or "immoveable seventh," so called because it is said to be always held sacred, is seldom observed here. It is also called the *Jayantí saptami* or 'seventh of victory,' and festivals are held on this day at the Kamalesvar temple in Srinagar and the temple to Jayanti at Jayakot in Borárau. The *Bhíshmáshtami* seems to be altogether unobserved if we except the entirely local ceremonies held in some few places and utterly unknown to the people at large. The eleventh is known as the *Bhíma ekádasi* and this and the full moon are very seldom observed.

Phágun.

The eleventh of the dark half of Phágun is called the *Bijaya ekádasi* or 'eleventh of victory.' The fourteenth is everywhere sacred to Siva. This is the day when all sins are expiated and exemption from metempsychosis is obtained. It is the anniversary of the apparition of the ling which descended from heaven to confound the rival disputants, Brahma and Vishnu, a scene which is described at length in the Linga Purána.[1] The day preceding is devoted by the pious and educated to fasting and all night long the deity is worshipped, and it is not until ablutions are performed next morning and offerings are made to the idol and the attendant priests that the worshippers are allowed to eat. The day is then kept as a holiday. In the great Saiva establishments the ceremonies are conducted with great splendour and are held to be especially sacred on this day, more particularly in those which were established before the Muhammadan invasion of India. These temples as enumerated by the local pandits are as follows :—(1) Rámeswar near Cape Komorin ; (2) Kedárnáth in Garhwál ; (3) Mahákála in Ujjain ; (4) Somnáth in Gujrát ; (5) Mallikarjun in the Dakhin ; (6) Bhíma Sankara ; (7) Onkárnáth on the Nerbudda ; (8) Visvanáth in Benares ; (9) Bhubaneswar in

Shivarátri.

[1] Translated in Muir, IV., 388.

Orissa; (10) Vaidyanáth in Bengal, beyond Dacca; (11) Bágeswar in Kumaon, and (12) Jageswar in Kumaon. As a rule, however, there is only a simple service in some temple or a ling is made of clay and worshipped at home. The elaborate ritual laid down in the *Bárshik pustak*, the authority in these hills, is seldom observed and only carried out by the wealthy through their *purohit*, or family-priest; the mass of the people neither now understand it nor have they the means to pay the fees of the hereditary expounders. The ceremonies observed comprise an offering of mustard or uncooked rice with flowers and water and then the mystical formula known as *pránáyám*, the first part of which comprises the '*ang-nyás—kar-nyás*.' This consists of separate sets of salutations to the seven members of the body (*ang*) and to the seven members of the hand (*kar*), each of which is accompanied by a mystical mantra in which the deities of one of the seven worlds is saluted in order that they may come and take up their abode for the time in the member of the worshipper dedicated to them. This formula will be better understood from the following table:—

The seven spheres of the	Sanskrit names.	Hindi equivalents.	Members of the hand.	Members of the body.
1. Earth ...	Bhúr-loka ..	Bhu ...	Thumb (*angusht*),	Chest (*hridaya*).
2. Sky ...	Bhuvar-loka ...	Bhuv ..	Fore-finger (*tarjani*).	Head (*sir*).
3. Planets ...	Swar-loka ...	Sva ...	Second ditto (*madhyama*).	Scalp-lock (*sikha*).
4. Saints ...	Mahar-loka ...	Mah ...	Third ditto (*anámika*).	Throat (*kanth*).
5. Sons of Brahma.	Jano-loka ...	Jan ...	Fourth ditto (*kanishtika*).	Eye (*netr*).
6. Penance...	Tapo-loka ...	Tap ...	Palm (*kartal*) ..	Navel (*nábhi*).
7. Truth ...	Satya-loka ...	Satyam ...	Back of hand (*karprisht*).	Back (*pith*).

The *kar-nyás* is performed first and is made by holding the nose by the right hand and then first holding up the thumb of the left hand and then applying the thumb to each finger, the palm and back of the hand successively, mentally repeating this salutation or *namaskár*:—'*Om Bhu: angushtábhyám nam*,' for the thumb: '*Om Bhuv: tarjanibhyám nam*,' for the fore-finger and so on changing the name of the sphere to that appropriated to the particular member. The '*ang-nyás*' is in all respects the same and a similar mantra is used whilst saluting

each of the seven members of the body. Other gesticulations are bringing the right hand around the head and clapping the hands three times which is supposed to purify all beings; also snapping the thumb against the two fore-fingers thrice with appropriate mantras which brings the ling into one's self.

The earth, air and sky are represented by the mystic syllables *bhúr, bhuvah, svar*, whilst these again are held by some to represent the old trinity Agni, Indra and Súrya, who even amongst the non-Bráhmanical tribes attained to considerable popularity. Again in the mystic word '*Om*' we have according to some A. U. M., representing the initial letters of the names of Agni, Varuna (a form of Indra) and Mitra (one with the sun): others refer these letters to Brahma, Vishnu and Siva, who comprise the *Tri-múrti* of advanced Bráhmanism. A triad is also worshipped at the temple of Jagannáth in Orissa, the forms of which represent the double cursive form of '*Om*' as ordinarily written in manuscript. In a note to his translation of the Málati and Mádhava of Bhavabhúti, Professor Wilson[1] explains '*Nyása*' as "a form of gesticulation made with a short and mystic prayer to the heart, the head, the crown of the head and the eye, as *Om sirase nama*, 'Om! salutation to the head'; with the addition of the *kavacha*, the armour or syllable *phat*, and the *astra*, the weapon or syllable *hun*. The entire *mantra*, the prayer or incantation, is then '*Om sirase nama, hun, phat.*" These formulæ were specially used by the sect of Yogis or Pásupatas, "the oldest sect probably now existing amongst the Hindus and with whose tenets and practices Bhavabhúti appears to have been thoroughly acquainted." Again Cunningham[2] in his Ladák gives the *mantra* addressed to the Bodhisattwas by the Buddhists of Tibet, taken from an actual Tibetan stereotype block, which ends with the line:—

'*Om Vajra-krodha, háyagriva, hulu, hulu, hun, phat.*

This is clearly derivable from the non-Bráhmanical worship of deities of montane origin.

Shiurátri at Jageswar.

At the *mahápúja* on the Shiurátri at Jageswar, the idol is bathed in succession with milk, curds, ghi, honey and sugar; cold and hot water being

[1] Works, XII., 5, 11, 53. [2] P. 386.

used alternately between each bathing. Each bathing has its appropriate invocation, prayer and offering which are in all respects the same as those prescribed in the plains.[1] Another form of worship is the '*jap*' or recitation of the one hundred and eight names of Siva, such as Rudra, Isána, Hara, Pasupati, &c. These are counted off on a rosary made of the seeds of the *rudráksha* (Abrus precatorius). As a rule, however, few remember this litany and the worshipper is satisfied by repeating a single name as often as he cares, thus "*Om siváya om*," or "*Om mahádeo*" is the favourite ejaculation of the '*jap*' in Kumaon. The leaves of the *bel* (Ægle marmelos) and the flowers of the *dhatúra* (Datura alba), the *kapúr nali* or *Kapúr nai* (Hedychium spicatum), the *játi* or *jai* (Murraya exotica?) and the rose are specially sacred to Siva and form a part of the *argha* or offerings made during his worship. There can be no doubt but that the present system of Saiva worship though popular and universal is of modern origin, and on this point we may cite the testimony of Professor Wilson:[2]—"Notwithstanding the reputed sanctity of the *Sivarátri*, it is evidently sectarial and comparatively modern, as well as a merely local institution, and consequently offers no points of analogy to the practices of antiquity. It is said in the *Kalpa Druma* that two of the mantras are from the Rig Vedas, but they are not cited, and it may be well doubted if any of the Vedas recognise any such worship of Siva. The great authorities for it are the Puránas, and the Tantras; the former—the Siva, Linga, Pádma, Matsya and Váyu—are quoted chiefly for the general enunciations of the efficacy of the rite, and the great rewards attending its performance: the latter for the mantras: the use of mystical formulæ, of mysterious letters and syllables, and the practice of *Nyása* and other absurd gesticulations being derived mostly, if not exclusively, from them, as the *Isána Sanhita*, the *Siva Rahasya*, the *Rudra Yámala*, *Mantra-mahodadhi* and other Tántrika works. The age of these compositions is unquestionably not very remote, and the ceremonies for which they are the only authorities can have no claims to be considered as parts of the primitive system. This does not impair the popularity of the rite, and the importance attached to it is evinced by the copious details which are given by the compilers of the *Tithi-Tattwa*

[1] See Wilson, II., 214: the prayers there given are paraphrased in the *Bárshik pustak*. [2] *Ibid*, 219.

and *Kalpa Druma* regarding it and by the manner in which it is observed in all parts of India."

Gosáins.

The Gosáins[1] founded by Sankara Achârya are still a powerful body in these hills. Sankara Achárya had four principal disciples who are usually named Padmapáda, Hastámalaka, Suresvara or Mandana, and Trotaka. Of these the first had two pupils, Tírtha and Ashrama; the second had also two, Vana and Aranya; the third had three, Sárasvati, Puri and Bhárati, and the fourth had three, Gír or Giri, Párvata and Ságara. These pupils became the heads of the order of Dásnámi Dandins or 'ten-named mendicants,' and any one joining the fraternity adopts one of the names. Formerly all supported themselves by alms and were celibates. Now some have married and become householders or have taken to trade or arms as a profession and are not acknowledged as brethren except perhaps in western India. The Gosáins proper are called Dandins from the *dandi* or staff carried by them in their travels. They are ruled by an assembly called the Dásnáma composed of representatives of the ten divisions which has complete control over all the *maths* of the order. On the death of a Mahant his successor is usually elected by the members of the *math* to which he belonged or, in some cases, the *chela* or pupil succeeds. The chief *math* of the order represented in Garhwál is at Sringeri on the Tungabhadra river in the Madras Presidency. They serve at Rudrnáth, Kalpeswar, Kamaleswar, Bhil-kedár, and indeed most of the principal temples dedicated to Siva.

Jangamas.

The Jangamas or Lingadháris, so called from their wearing a miniature ling on their breast or arm, acknowledge the spiritual supremacy of Basava, who was minister of Bijjala Deva Kalachuri Raja of Kalyána and murdered his master in 1135 A.D. Basava wrote the Básava-Purána and his nephew, the Channa-Básava Purána, which are still the great authorities of the sect. The name Basava is a Kánarese corruption of the Sanskrit '*vrishabha*,' and the Básava-Purána is written in praise of the bull Nandi, the companion and servant of Siva. The Jangamas style themselves Puritan followers of Siva

[1] The name is derived according to some from '*go*,' passion, and '*swámi*,' master: he who has his passions under control.

under the form of a ling and call all others idolators. They say that they reverence the Vedas and the writings of Sankara Achárya, but they reject the Mahábhárata, Rámáyana and Bhágavata as the invention of Brahmans. They consider both Sankara Achárya and Basava to have been emanations of Siva. Basava himself was a Saiva Brahman and devoted himself to the worship of Siva under the form of a ling as the one god approachable by all. He denounced the Brahmans as worshippers of many gods, goddesses, deified mortals and even of cows, monkeys, rats, and snakes. He denied the use of fasts and penances, pilgrimages, sacrifices, rosaries and holy-water. He set aside the Vedas as the supreme authority and taught that all human beings are equal, and hence men of all castes and even women can become spiritual guides amongst the Jangamas. Marriage is imperative with Brahmans, but permissive only with the followers of Basava. Child-marriage is unknown and betrothal in childhood unnecessary. Polygamy is permissible with the consent of a childless wife. A widow is treated with respect and may marry again, though whilst a widow she may not retain the jacket, perfumes, paints, black glass armlets, nose and toe rings which form the peculiar garb of the married woman. A Jangam always returns a woman's salutation and only a breach of chastity can cause her to lose her position. The Jangamas are also called Víra Saivas to distinguish them from the Arádhyas, another division of the followers of Basava who call themselves descendants of Brahmans and could not be induced to lay aside the Bráhmanical thread, the rite of assuming which requires the recital of the *gáyatrí* or hymn to the sun: hence the Jangamas regard this section as idolators and reject their assistance. Those who totally reject the authority of Brahmans are called Sáurányas and Viseshas. The Sámánya or ordinary Jangam may eat and drink wine and betel and may eat in any one's house, but can marry only in his own caste. The Visesha is the guru or spiritual preceptor of the rest. The lesser vows are addressed to the linga, the guru and the Jangam or brother in the faith. The linga represents the deity and the guru he who breathes the sacred spell into the ear and makes the neophyte one with the deity: hence he is reverenced above the natural parents. The lingas in temples are fixed there and therefore called *Sthávira:* hence

the lingas of Basava are called *jangama* or able to move about, and the followers Jangamas or living incarnations of the ling. The Arádhyas retain as much of the Bráhmanical ceremonial as possible, they look down on women and admit no proselytes, they call themselves Vaidikas and say that the Jangamas are Veda-bahyas. The latter declare that every one has a right to read the Vedas for himself and that the Arádhyas are poor blind leaders of the blind who have wrested the scriptures to the destruction of themselves and others.

The Jangama worships Siva as Sadashiu, the form found in Kedár, who is invisible, but pervades all nature. By him the ling is reverenced as a reliquary and brings no impure thought. He abhors Máya or Káli, who is one with Yona and is opposed to licentiousness in morals or manners. He aims at release from fleshly lusts by restraining the passions; he attends to the rules regarding funerals, marriage and the placing of infants in the creed, and is, as a rule, decent, sober and devout. Burial is substituted for cremation and Brahmans are set aside as priests. The Víra-Saivas illustrate their creed by the following allegory :— 'The guru is the cow whose mouth is the fellow-worshipper and whose udder is the ling. The cow confers benefits by means of its udder, but this is filled through the mouth and body, and therefore if a Vira-Saiva desires the image to benefit him, he must feed the mouth, or in other words sustain and comfort his fellow-worshippers, and then the blessing will be conveyed to him through the teacher.' When the Bráhmanical Siva is mentioned in their books it is only to show that the true Víra-Saivas are more than a match for the Bhu-suras or gods or the earth as the Brahmans style themselves. The ordinary Saiva temples are in some cases served by orthodox Smárta (Saiva) Bráhmans. The Jangamas still serve some of the principal temples in Garhwal.[1]

[1] The chief authorities for the Lingáyat system are :—
The Básava-Purána of the Lingáyats translated by the Rev. G. Würth, J.B.B.R.A.S., VIII., 63
The Channa-Básava Purána translated by the same. *Ibid.*
The creeds, customs and literature of the Jangamas, by C. P. Brown, M.J.L.S.XI. 143 : J R.A.S. V *n. s.* 141.
The Básava-Purána, the principal book of the Jangamas, by the same *Ibid.*, XII. 193.
On the Gosáins by J. Warden, M. J. L. S. XIV. 67.
Castes of Malabar. *Ibid.*, 1878, p. 172.

Kánphatas.

The Kánphatá Jogis conduct the worship in all the Bhairava temples that are not ministered to by Khasiyas. Their principal seat is at Danodhar on the edge of the Ran of Kachh about twenty miles north-west of Bhúj in the Bombay Presidency. They wear brick-dust coloured garments and are remarkable for the large earrings of rhinoceros horn, agate or gold worn by them and from which they are named. They are very numerous in these hills and possess several large establishments. They follow the Tántrika ritual, which is distinguished by its licentiousness. Both the ling and the Yona are worshipped by them and they declare that it is unnecessary to restrain the passions to arrive at release from metempsychosis. They are the great priests of the lower Sákti forms of Bhairava and even of the village gods. They eat flesh and drink wine and indulge in the orgies of the left-handed sect. Departing from the original idea of the female being only the personified energy of the male, she is made herself the entire manifestation and, as we have seen in the case of Durga, receives personal worship, to which that of the corresponding male deity is almost always subordinate. The Sáktas are divided into two great classes, both of which are represented in these districts the Dakshinácháris and Vámácháris. The first comprise those who follow the right hand or open orthodox ritual of the Puránas in their worship of Sakti, whilst the latter or left-hand branch adopt a secret ceremonial which they do not care openly to avow. The distinction between the two classes is not so apparent in the mass of the Sáktas here as amongst the extreme of either class. The more respectable and intelligent, whatever their practice in secret may be, never profess in public any attachment to the grosser ceremonial of the left-hand Sáktas, and it is only fair to say that they generally reprobate it as opposed to the spirit of the more orthodox writings. As a rule the worshipper simply offers up a prayer and on great occasions presents one, two, five or eight kids, which are slaughtered and afterwards form the consecrated food of which all may partake. The left-hand ritual is more common in Garhwál, where there are some sixty-five temples dedicated to Nágrája and Bhairava and some sixty dedicated to Bhairava alone, whilst there are not twenty temples to these forms in Kumaon. Nágrája is supposed

to represent Vishnu and Bhairava is held to be a form of Siva, and these with their personified energies are considered present in each of these temples, though in the actual ceremony the worship is chiefly directed to the female form of Siva's Sákti. In all the rites, the use of some or all the elements of the five-fold *makára*, viz., *matsya* (fish), *mánsa* (flesh), *madhya* (wine), *maithuna* (women) and *mudra* (certain mystical gesticulations), are prescribed. Each step in the service is accompanied by its appropriate mantra in imitation of those used with the five-fold offerings of the regular services. In the great service of the *Śri Chakra* or *Púrnábhishek*,[1] the ritual, as laid down in the *Daskarm*, places the worshippers, male and female, in a circle around the officiating priest as representatives of the Bhairavas and Bhairavis. The priest then brings in a naked woman, to whom offerings are made as the living representative of Sákti, and the ceremony ends in orgies which may be better imagined than described. It is not therefore astonishing that temple priests are, as a rule, regarded as a degraded, impure class, cloaking debauchery and the indulgence in wine, women and flesh under the name of religion. Garhwál is more frequented by pilgrims and wandering religious mendicants, and this is given as a reason for the more frequent public exhibition of their ceremonies there. In Kumaon the custom exists, but it is generally observed in secret, and none but the initiated are admitted even to the public ceremonies. The Tantras prescribe for the private ceremony that a worshipper may take:—"a dancing-girl, a prostitute, a female devotee, a washerwoman or a barber's wife," and seating her before him naked, go through the various rites and partake with her of the five-fold *makára*.

Sacrifices.

The *bali-dána* or oblation when offered by Vaishnavas consists of curds, grain, fruits and flowers, but when offered by the Saiva Sáktas here usually assumes the form of living victims, the young of buffaloes or more generally of goats. At Purnagiri in Tallades, Hát in Gangolí and Ranchula Kot in Katyúr, the consort of Siva, in her most terrible form, has attained an unenviable notoriety as having

[1] See for further details Wilson, I., 263, and Ward, III., 194, ed. 1822; the descriptions there given fairly represent the practice in the hills.

been in former times appeased by human sacrifices. In the neighbouring country of Nepál,[1] it is recorded that the custom of offering human sacrifices to Bachhla Devi, another form of Káli, was introduced by Siva-deva-barma, and that when one of his successors, Viswadeva-barma, considered it a piece of great cruelty and desired to abolish it "Nara-siva made a great noise. Whereupon the Raja went to see what was the matter and the Nara-siva came to seize him. The Raja, being pleased at this, gave him a large *jágír* which remains to the present day." In Bhavabhúti's charming drama of Málati and Mádhava we have an account of the attempt made by Aghoraghanta to offer Málati as a sacrifice to Chámunda Devi when she is rescued by Mádhava.[2] In the collection of legends known as the Katha Sarit Ságara frequent mention is made of the sacrifice of human victims by the barbarous tribes inhabiting the forests and mountains, and we know that up to the present day the practice has existed amongst the wild tribes in Khondistán. In the Dasa Kumára Charitra, also, we are told of Praháravarma, Raja of Mithila, being attacked by the Savaras and losing two of his children who were about to be offered by the barbarians to Chandi Devi when they were fortunately rescued by a Brahman. The Kálika Purána, too, gives minute directions for the offering of a human being to Káli, whom, it is said, his blood satisfies for a thousand years. Both at Purnagiri and Hát a connection and oneness with the great Káli of Calcutta is asserted and cocoanuts are much esteemed as a subsidiary oblation. In the latter place the sacrificial weapon used in the human sacrifices is still preserved.[3]

Holi.

The Holi commences on the eighth or ninth and ends on the last day of Phálgun *Sudi*, locally known as the *chharari* day. Some derive the name Holi from the demon Holika, who is one with Pútana; but the *Bhavishyottara Purána*, which has a whole section devoted to this festival, gives a different account which may be thus briefly summarised:—In the time of Yuddhishthira there was a Raja named Raghu who governed so wisely that his people were always happy, until

[1] Wright's Nepál, 126, 130: Sivadeva lived about the tenth century. [2] Wilson, XII., 58. [3] Those who are desirous of investigating the subject of human sacrifices further are referred to Wilson's works, I., 264; II., 247; III., 353: IV., 143; Max Müller's History of ancient Sanskrit Literature, 408: Muir's Sanskrit Texts, I., 355: II., 184; IV., 289: Wheeler's History of India, I., 403: Wilson's India, 68, and Colebrooke's Essays, 34.

one day the Rákshasi Dundha came and troubled them and their children. They prayed the Raja to aid them and he consulted the Muni Nárada, who directed them to go forth in full confidence on the last day of the light half of Phálgun and laugh, sport and rejoice. Then they should set up a bonfire and circumambulate it according to rule, then every one should "utter without fear whatever comes into his mind. In various ways and in their own speech let them freely indulge their tongues and sing and sing again a thousand times whatever songs they will. Appalled by those vociferations, by the oblations to fire and by the laughter of the children," the Rákshasi was to be destroyed. "Inasmuch as the oblation of fire (*homá*) offered by the Brahmans upon this day effaces sin and confers peace upon the world (*loka*), therefore shall the day be called *holika*." The Kumáonis take full advantage of the license thus afforded and under the influence of bhang proceed from village to village singing obscene songs and telling stories. The red-powder or *gulál* which is used in the sports during the festival is made from the flowers of the rhododendron. Although preparations commence on the eighth or ninth, the real festival does not begin until the eleventh, known as the *chírbandhan* day, or *amardki ekádasi*. On this day, people take two small pieces of cloth from each house, one white and the other coloured, and after offering them before the Sakti of Bhairava make use of them thus:—A pole is taken and split at the top so as to admit of two sticks being placed transversely at right angles to each other and from these the pieces of cotton are suspended. The pole is then planted on a level piece of ground and the people circumambulate the pole, singing the Holi songs in honor of Kanhaiya and his Gopis and burn it on the last day. This ceremony is observed by the castes who assume connection with the plains castes, but the lower class of Khasiyas, where they observe the festival, simply set up the triangular standard crowned by an iron trident, the special emblem of Pasupati, which they also use at marriage ceremonies. The Holi is chiefly observed in the lower pattis and is unknown in the upper hills. The *Tika* holi takes place two days after the *chharari* or last day of the Holi, when thank offerings are made, according to ability, on account of the birth of a child, a marriage or any other good fortune. The

expenses of these festivals are usually met by a cess on each house which is presented to the officiating Brahman for his services, and he, in return, gives to each person the *tilak* or frontal mark, made from a compound of turmeric. The practice of the orthodox and educated in no way differs from that current in the plains. This is clearly another of those non-Bráhmanical ceremonies connected with the montane Pásupati cult which have survived.

Festivals regulated by the solar calendar.

Each *sankránt* or the passage of the sun from one constellation into another is marked by festivals. Most of the Bhairava temples in Garhwál and even such as Narmadeswar, Briddh Kedár and Náráyan have special assemblies on every *sankránt* throughout the year, whilst others hold special services only on particular *sankránts*, such as the Bikh, Mekh and Makar. Generally the festivals of the village deities as well as all civil duties and engagements are regulated by the calendar for the solar year.

Mín sankránt.

The *Mín* or *Chait sankránt* fell on the 12th March, 1878, and on the 13th, girls under nine years of age and boys who have not yet been invested with the sacrificial thread (*janeo*) visit their relations, to whom they offer flowers and smear rice coloured with turmeric (*haldu*) on the threshhold of their doors: hence the name *Halduwa sankránt*. In return, the children receive food and clothing. The low castes Hurkiya and Dholi, the dancers and musicians of the hills, also, go about from village to village during the whole of this month singing and dancing and receive in return presents of clothes, food and money.

Bikh sankránt.

The *Mekh* or *Baisákh sankránt* fell on the 12th April, 1878. It is also called the *Vishupadi*, *Vikhpadi*, *Vijoti*, *Vikhoti* or *Bikh sankránt*. On this day, an iron rod is heated and applied to the navels of children in order to drive out the poison (*bikh*) caused by windy colic and hence the local name *Bikh sankránt*. It is a great day of rejoicing for both Saivas and Vaishnavas and fairs are held at the shrines of Uma at Karnprayág, Síteswar in Kota, Tungnáth, Rudrnáth, Gauri, Jwálpa, Káli, Chandika, &c., as well as at Badrináth, Vishnuprayág, Dhyánbadri and the temples of Náráyan and Ráma. Most of the more important temples have special services on the *Bikh* and *Makar sankránts*. The latter represents the old computation by

which the entrance of the sun into the sign of Capricorn was considered the commencement of the new year and the former the new system by which the entrance of the sun into the sign *Mesha* or Aries begins the new year: hence both days are held sacred throughout both districts. I have not noticed that any special festival is held on the *Brish* or Jeth *sankránt* or on the *Mithun* or Asárh *sankránt* except one, on the latter date, at the Kailás hill above Bhím Tál, though, as already noted, there are numerous temples where services are held on every *sankránt* throughout the year.

Kark sankránt.

The *Kark sankránt* fell in 1878, on the 15th July. It is known also as the *Harela*, *Hariyálo* or *Haryáo sankránt* from the following custom:—On the 24th Asárh the cultivators sow barley, maize, pulse (*gahat*) or mustard (*lai*) in a basket of earth and on the last day of the month, they place amidst the new sprouts small clay images of Mahádeo and Párvati and worship them in remembrance of the marriage of those deities. On the following day or the *Kark sankránt*, they cut down the green stems and wear them in their head-dress and hence the name *Harela*. This custom is in every way similar to the practice of wearing the rose, observed in Great Britain. The *Kark sankránt* was the great day of the *bagwáli* or stone-throwing festival for Chamdyol in Patti Gumdes, Rámgár in Patti Rámgár, at the Náráyani temple in Siloti and at Bhím Tál in Chhakháta.

Bagwáli.

It was also held at Debi Dhúra on the full moon of Shaun at Champáwat, Patua in Súi and Siyál De Pokhar in Dwára on *Bhayya dúj* or Kárttik Sudi 2nd. The *bagwáli* was known as the *siti* in Nepál[1] and is said to have been established there at a very early period by Raja Gunakáma Deva, who received in a dream a command to that effect from Sri Skandaswámi, the god of war. He appears to have revived the custom of the *kilátari* game which was introduced by Bhuktamána, the founder of the Gwála dynasty, as a portion of the games held in the Sleshmántak forest, sacred to the Pasupati form of Siva. Gunakáma drew up strict rules for the conduct of the fray which were at first carried out with the greatest rigour and the prisoners captured on either side were offered as sacrifices to Devi. The game was played from Jeth to Siti-khashti, and though the murder

[1] Wright, 108, 156.

of the prisoners soon fell into abeyance, many grievous accidents occurred until at length the custom was abolished by Sir Jung Bahádur on account of Mr. Colvin, the Resident, having been struck by a stone whilst looking on. In these districts it was the custom for several villages to unite and defend the passage across a river against a similar force from the other side. As the hill-men are good slingers injuries occurred and even fatal accidents, so that the custom was prohibited, and now the combatants amuse themselves merely by pelting stones at some boulder or conspicuous tree.

In Juhár, the Bhotiyas offer a goat, a pig, a buffalo, a cock and a pumpkin[1] which they call *panch bali* to the village god, on the *kark sankránt*. The day is given up to feasting and drinking spirits and towards evening they take a dog and make him drunk with spirits and bhang or hemp and having fed him with sweetmeats, lead him round the village and let him loose. They then chase and kill him with sticks and stones and believe that by so doing no disease or misfortune will visit the village during the year. The festivals on this day at Baleswar in Chárál, and at Dhernáth in Súi Bisang, are attended by all the neighbouring villagers.

Bhado sankránt.

The *Sinha* or *Bhado sankránt* took place on the 15th August, 1878. It is also locally known as the *Ghi* or *Ghyúshgyán sankránt*, because on this day even the poorest classes eat *ghi* or clarified butter, and has the name *Walgiya* because curds and vegetables are then offered by all persons to those in authority over them. There is a fair on this day at the temple of Vaishnavi Devi at Naikuni in Seti.

Kanya sankránt.

The *Kanya* or *Asoj sankránt* fell on the 15th September, 1878. It is also locally known as the *Khataruwa sankránt* from the people gathering hay and fuel on this day. From a portion of these first fruits after the rains a bonfire is made into which the children throw cucumbers and flowers and make money by singing and dancing. The following story is told in explanation of this custom :—"In former days one of the Chand Rajas sent a force to invade Garhwál and gave strict injunctions to his general to convey speedily the news of any victory that should be gained. The general told the Raja

[1] *Kumila or petha*, Cucurbita pepo (Roxb.).

that when he saw the hills around blazing with bonfires he might know that Garhwál had been conquered, and for this purpose heaps of fuel were collected on all the higher peaks along the line of march and placed under charge of guards. The object of the expedition was attained on the *Kanya sankránt* and the fuel was fired and peak answered peak until in a few hours a bonfire was blazing on every hill from Garhwál to Almora. The Raja was so pleased at the success of his troops and the rapidity with which the news of the victory was communicated that he gave orders to continue the custom on each anniversary." Hence this custom has been observed ever since in Kumaon, but not in Garhwál.

Makar sankránt.

The *Makar* or *Mágh sankránt* took place on the 12th January, 1878. It is also known as the *Ghugutiya*, *Phúl*, and *Uttaráyini* or *Uttraini sankránt*. The name '*Ghugutiya*' is given from the small images of flour baked in sesamum oil or ghi and made to resemble birds which are strung as necklaces and placed around the necks of children on this day. On the morrow or the second day of Mágh the children call the crow and other birds and feed them with the necklaces and eat a portion themselves. The name '*Phúl*' *sankránt* is derived from the custom of placing flowers, especially those of the rhododendron, at the threshhold of friends and relations who, in return, give presents of rice and grain. The name '*Uttaráyini*' is derived from its being the beginning of the winter solstice according to the Hindu system and as with us commences with the entry of the sun into the sign Capricorn. The name '*Makara*' is the Hindu equivalent for the constellation corresponding to Capricorn and is represented by a figure half fish and half goat. The whole of Mágh is specially devoted to the worship of Vishnu and the sun and according to the Pádma-Purána bathing during this month is particularly efficacious. The great commercial fairs at Bágeswar and Thal Baleswar are held on this day. Amongst the Sikhs, the *Makar sankránt* is the occasion of a fair at Rikhikes on the Ganges connected with the Dehra establishment.

Domestic ritual.

The ritual in use in the domestic ceremonies which are obligatory on all the four castes afford us some firm basis from which we may judge of the character of the existing form of worship amongst those who

consider themselves one with orthodox Hindus. The ritual for temple use has been compiled by a class for their own purposes and usually with the object of setting forth the preferential cult of some particular deity or of inculcating the tenets of some particular sect, and although the general outline of the ceremony is the same in all, the details vary considerably. The village-deities have no formal ritual committed to writing and in general use, so that the ceremony is a meagre imitation of that in use in the orthodox temples and varies with the celebrant. The authorized domestic ritual in use in Kumaon fairly represents the ceremonial observed by those who consider themselves one in faith with the orthodox Hindus of the plains. It will show no great divergence in ordinary ceremonies from the procedure observed in the plains, for which, however, I have not been able to procure an authority that could be relied upon. The work[1] consulted is the *Dasa-karmádi paddhati*, or 'Manual of the ten rites, &c.,' which is held in great esteem in this portion of the Himálaya. It gives the ritual to be observed on every occasion from conception until marriage. Each ceremony has certain preparatory services common to all and which occupy the first ten chapters of the Manual, *viz.*:—(1), *Svasti-váchana*; (2), *Ganesha-púja*; (3), *Mátri-púja*; (4), *Nandi-srádddha*; (5), *Punyáha-váchana*; (6), *Kalasa-sthápana*; (7), *Rakshá-vidhána*; (8), *Ghri-tachchhdya*; (9), *Kusha-kandika*; and (10), *Kusha-kandikopayogi sangraha*. In practice, however, the ceremony is shortened by the omission of several of these services and, as a rule, the second, third and fourth chapters with the sixth and seventh are alone read. With regard to these and all other observances their length and character would seem to depend on the means and inclination of the person who causes the ceremony to be performed. The poor man obtains a very shortened service for his few coins, whilst the wealthy can command the entire ritual and the services of numerous and skilled celebrants. The rich and dissolute can afford to keep Brahmans in their employment who vicariously perform for them all the intricate and tedious ceremonies prescribed by the Hindu ritual

[1] The copy used by me contains the preparatory ceremonies (pp. 1-28); those held on the birth of a son (pp. 29-61); those on his assuming the sacrificial thread (pp. 69-132), and those on marriage (pp. 150-205), besides other services for special occasions. This work has since been lithographed at the Naini Tál press.

and at once relieve their masters from a disagreeable duty and ensure for them the fruits of a devout life. It will be seen, however, that the first six chapters referred to form a necessary part of the ritual of every important ceremony and are repeated numbers of times at different stages. They are referred to hereafter as the 'preparatory ceremonies' and are closed with a *sankalpam* or dedication to the particular object in view at the time, so that the merit acquired by performing them may aid in the attainment of the object aimed at.

Daily prayers.

Before commencing an account of the ceremonies proper to particular objects and seasons it will be convenient to refer here to those known as *nitya karm* or obligatory, to be observed at morn, noon and eve. The necessities of every-day life, however, contrive that one recital before taking food, either in the morning or in the evening, shall be considered sufficient, and we shall now describe the morning service, which with a few slight changes serves for all. The usual morning routine is first gone through by drawing up the sacrificial thread and placing it on the left ear before retiring, next washing the teeth, bathing and applying the frontal marks with powder sandal, or red sandars and rice. The *sandhya* or office of domestic worship then commences and is opened by placing some water in the hollow of the right-hand from which a sup is taken (*achamanam*) whilst mentally repeating the mantra :—'*Om*, to the Reg-veda, hail:' a second is then taken with the words :—'*Om*, to the Yajur-veda, hail:' and a third with the words :—'Om, to the Sama-veda, hail.' A fourth is then taken whilst repeating the formula :—'*Om*, to the Atharveda, hail,' and is rejected immediately on completing the invocation. The *choti* or tuft of hair left on the top of the head is then laid hold of whilst the following mantra is mentally repeated :—'Invoking the thousand names of Brahma, the hundred names of the top-knot, the thousand names of Vishnu I tie my top-knot.' The mouth is then cleansed by passing the thumb of the right-hand over the moustache to each side from the parting. Then follows the sprinkling (*indriya sparsa*) of the mouth, nostrils, eyes, ears, navel, breast, throat, head, arms and palms and back of the hands with watre.

Achamanam.

Sparsa.

and the salutation 'Om' prefixed to the name of each member[1] and mental prayer for its health and strength.

Abhishek.

The worshipper then touches the ground with the third finger of his right-hand whilst repeating the mantra:—"O thou who hast made this earth and all it contains and protectest all by thy power make me pure." Water is next taken in the hand whilst he mentally recites the mantra:—"May any evil or trouble which is due to me this day be by thy power prevented." This is followed by the first *abhishek* or aspersion in which water is taken in the left hand and sprinkled with the right hand over each member as before with the purificatory mantra:—"*Om bhú*, protect my head; *om bhuvah*, protect my eyes; *om svah*, protect my throat; *om mahah*, protect my breast; *om janah*, protect my navel; *om tapah*, protect my feet; *om satyam*, protect my head; *om kham*, Brahma protect me everywhere." This is known as the *púrvaka-márjjana-mantra*. The *kara-nyás* in which the members of the hand are mentally assigned to the protection of the mantra follows.

Karú-nyás.

The first motion consists in placing the first finger of each hand inside and against the middle joint of the thumb and drawing it gently to the top of the thumb whilst repeating mentally the mantra[2]:—*Om bhúh angushtábhyam namah*. The second motion is made by drawing the thumb from the first joint of the forefinger to the top whilst repeating mentally the mantra:—*Bhuva tarjanibhyam namah*. The remaining motions are similar and for the second finger the mantra:—*Svah madhyamábhyam namah* is repeated; for the third:—*Tat sabiturvarenyam anámikhábhyam namah*, and for the fourth:—*Bhargo devasya dhimahi kanishthikábhyam namah*. Then the palms and backs of the hands are touched whilst the mantra:—*Dhiyo-yonah prachodayát karatala karaprishthábhyam namah* is repeated.

[1] *Om vák, vák; Om prána, prána; Om chakshu, chakshu; Om srotram, srotram; Om nábhi; Om hridaya; Om kanth; Om sira; Om báhuldhyám Yasobalam; Om karatala karaprishthe.* [2] *Bhúr, bhuvah, svah*, are the three mystical words known as the *vyáhriti mantra* and are untranslateable They may be connected with the name of the deity as lord of earth, sky and heaven. The mantras here given simply mean 'Om, glory to the thumb': to the first finger and to the second finger, &c. The *gáyatri* verse is then brought in and divided into three portions as a preface to the salutation to the remaining parts of the hand. In full it is '*Tat sabitur varenyam bhargo devasya dhimahi dhiyo yonah prachodayát* and occurs in Rig-Veda, III., 62, 10. From being addressed to the sun it is called Savitri and is personified as a goddess Hereafter we shall see that other verses also are called *gáyatri*.

Anga-nyás.

The *anga-nyás* or mental assignment of the members of the body to the protection of the great mantras is as follows :—*Om bhúh,* glory to the heart; *bhuvah,* glory to the head; *sváhá* (hail); *svah,* to the top-knot, *vashat* (here meaning hail); *tat sabitur varenyam,* to the navel or the armour of the mantras, *hún; bhargodevasya dhímahi,* to the eyes, *vaushat; dhiyo yo nah práchodayat,* to the weapon of the mantras, *phat, phat, phat* accompanied by clapping the hands three times: a clearly Tantrik observance. Next comes the

Dhyána.

dhyána or *aghamarshan* or meditation in which with clasped hands and closed eyes the celebrant mentally recites and considers the verses commencing :—*Aum ritancha satyanchámíddhát, &c.*

Pránáyám.

In Kumaon, the *pránáyám* is prefaced by a short address (*chhanda*) to the personified '*Om,*' the Brahmarishis, Vaidik metres and the supreme being.[1] Water is taken in the hand whilst the address is mentally recited, after which the water is thrown away. The first motion of the *pránáyám* is made by placing the fore-finger of the right-hand on the right nostril and exhaling with the other nostril whilst a mystical mantra[2] is mentally repeated. This occurs three times whilst exhaling and three times whilst inhaling.

Abhishek.

A second *abhishek* or purificatory aspersion of the body generally takes place next with the mantra :—*Om apohishtá mayo bhuvah snán urjjiye, &c.* Then water is taken in the hand and applied to the nose with the mantra :—*Drupadádivimunchán sannannátho maládishu pútam pavitrenovájyam ápah suddhanta menasah.*

Anjali.

Next the *anjali* is performed in which water is taken in the hollow of both hands and whilst the *gáyatri*-mantra is slowly recited the water is poured through the fingers on the ground. The celebrant should stand with his face towards the east whilst the verse is

[1] *Omkárasya brahmarishih gáyatríchhándah paramátmá devatá pránáyáme viniyogah.* [2] *Om bhúh, om bhuvah, om svah, om mahah, om janah, om tapah, om satyam tat sabiturvarenyam bhargodevasya dhímahi dhiyo yo nah prachodayát apo jyoti raso 'mritam brahm bhúr bhuvah svarom.* A mixture of the *vyáhriti* and *gáyatri* mantras with some additions.

chaunted and should repeat it three times. This is followed by the *Upasthána* or approaching the deity in worship in which the celebrant draws the fore-arms parallel to the body with the palms of the hands open and the thumbs on a level with the ears whilst the mantra is repeated :—*Om udvayantamasas, &c.*

Upasthána.

Next the head, navel, heart, top-knot and forehead are touched with appropriate mantras.[1] The sacrificial thread is then wound around the right-hand three times whilst the *gáyatri* is repeated either 8 or 10 or 28 or 108 or 1,000 times according to the inclination of the worshipper. Water is again taken in the hand and if the *gáyatri* have been repeated a fixed number of times, the morning's devotion ends with the formula :—*Brahma svarupine bhagwán prítostu ;* if at mid-day, with *Vishnu, &c.*, and if at evening with *Rudra, &c*, whatever the number may be. Where no account of the number of times is kept the conclusion[2] is :—" O Lord, the treasure of mercy, through whose compassionate goodness whatever is worthy in my devotions is accounted for righteousness, may the four objects of existence (religious merit, wealth, pleasure and final emancipation) be attained by me this day." Whilst these prayers are being repeated the water is allowed to trickle slowly on to the ground. The *sandhya* closes with the *dandawat* or salutation[3] and the *áchamanam* or rinsing of the mouth as in the beginning.

The *Svasti-váchana* is seldom read in Kumaon. It opens with the direction that the celebrant should at an auspicious moment bathe, put on clean clothes, affix the frontal mark and seated with his face towards the east in a properly prepared place, recite the invocation of blessings.[4] The Ganesha-*púja* follows and is universally observed on all occasions as the *pradhán-anga* or leading section of every rite. The rubric directs that the celebrant should rise early on the morning of the ceremony and having

Svasti-váchana.

[1] *Agnir mukhe, brahma hridaye, vishnu sikháyán, rudro laláte.* [2] *He ísvara dayánidhe bhavat kripayánena japopásanádi karmaná dharmártha káma mokshánám sadhyah siddhir bhavennah.* [3] The hands are clasped in front of the breast whilst this mantra is repeated :—*Om namah sambhaváyacha mayobhaváyacha namah sankaráyacha mayaskaráyacha namah siváyacha sivatarayacha, devágáta bidogátu mitragáta mitah manasarya mimandeva yajna gvan sváhá bátadhá.* [4] The *váchana* consists of numerous verses in praise of the gods.

bathed and put on clean clothes should after performing the *nitya-karm*[1] light a lamp and commence the worship of Ganesha, which should precede every other rite. First adore Vishnu with the following verse :—" Thou who art clothed in white, moon-coloured, four-armed, of pleasing face, the remover of obstructions, the bestower of good fortune and victory, what can oppose thee Janárdan, of the colour of the lotus, who dwellest in the hearts of thy votaries." Next follows the adoration of Ganesha with the verse :—" *O Bakrtund*, great bodied, bright like a kror of suns, o thou that preventeth harm, be thou present always in every work." Then the ceremony known as *Argha sthápana* or consecrating the *argha*[2] takes place. Take some powdered sandal wood and draw on the ground the figure of a triangle and around it a square and again a circle, then place on them sandal, rice and flowers. Next place the *argha* filled with water in the middle and say :—" In this water may the waters of the Ganga, Jamuna, Godáveri, Sarasvati, Narmada, Sindhu and Káveri be present." Next put sandal, rice and flowers in the water of the *argha*. Then set up a brazen vessel on which the image of the sun has been drawn (with sandal or red sandars) in the form of interlaced triangles, the apices of which will represent his rays and a circle around them his form, and before presenting to it the water of the *argha* with flowers recite mentally the *dhyána*-mantra[3] and in offering the water of the *argha*, the mantra[4] in which the sun is invoked as the thousand-rayed, full of brightness, lord of the world, &c., and is asked to accept the domestic *argha* of his worshipper. Next sprinkle mustard-seed, sesamum and rice in order that no evil spirit may approach and interrupt the ceremony and use the mantra[5] for keeping off demons and goblins. Then crack the thumb and second finger together three times behind the back in order that the goblins behind may be driven away. The earth should next be saluted and afterwards

Ganesha-*púja*.

Argha-sthápana.

[1] The *sandhya*, already noticed. [2] A small cup usually made of brass.

[3] *Aruṇoruṇapankaje nishaṇah kamale abhíti varaukarairdadhánah svarvcháhitamaṇḍalas trinetro ravirá kalpaśatáhul batánnah.* [4] *Ehi súryyá sahasránśo tejoráśe jagatpate anukanpayamán bhaktyá grihánárghañ divákarah.* [5] *Apakrámantu bhútáni piśácháh sarvatodiśa sarveshám avirochena brahmakarmasamárabhet pákhañda káriṇo bhútá bhúmauye chántarikshagáh divilokesthitáye cha tena śyantu śivájnayá nirgochchhatáñ cha bhútánán vartma dadyát svavámatah.*

Vishnu with the verse:—'O thou whose throne is the lotus, &c.' Fill the *argha* once more and sprinkle all the materials for worship and go through the *pránáyám*. Next take sesamum, *kusha*-grass, barley and water, and make the great dedication[1] with the mantra:—'Om Vishnu, Vishnu, Vishnu, adoration to the supreme, the first eternal male,' &c., with the usual definition of place, time and person, *viz.*, in the island Jambu, the division Bharata, the country of the Aryas, in this holy place, the Himavat and hills, in the latter half of the life of Brahma, in the holy *Váráha-kalpa*, at the end of the Krita, Treta and Dwápar *Yugas*, *&c.*, giving the year, season, month, fortnight, day and hour of the ceremony with the name of the person in whose behalf the ceremony is performed, his father and grandfather's name, caste and family, and the ceremony itself, with the prayer that the benefits to be derived from its performance may be bestowed on him.

Name of Ganesha.

The worship of Ganesha now proceeds, each step in the ceremony being accompanied by an appropriate mantra. First the *pítha* or triangle is addressed with the mantra containing the names of Ganesha as son of Siva:—"*Om* sprung from the fierce, from the blazing, Nandi, from the giver of pleasure, from Kámarupa, from Satya, from the terrible, from the bright, glory to thee who removeth all obstacles, who sitteth on the lotus. I meditate on thee, the one-toothed, elephant-headed, large-eared, four-armed, holder of the noose and goad, perfect Vináyak." This is followed by the invitation (*áváhana*) to Ganesha to be present and take the place prepared for him with the mantra:—*Binávaka namastestu umámalasamudbhavah imámmayánkritánpújan grihána surasattama.*—'Glory to thee Binayak, born of Uma, accept my worship, best of gods.' Next comes the *ásana* or throne to which the deity is invited with the mantra:—*Nánáratnasamáyuktan muktáhára vibhúshitan svarnasinhásanan chára prityarthan pratigrihyatán.*—

Aváhana.

Asana.

[1] *Om vishnuh vishnuh vishnuh namah paramátmane śrípuránapurushottamáya Om tatsa datraprithivyán jambúdwipe bharatakhande áryyávartte punya kshetre himavat parvataikadeśebrahmanodwitiya-parárddhe śriśvetavárdhakalpe kritatretádwáparánte saptame vaivasvatamanvantare ashtávinśatitam kaliyugasya prathamacharane shashtayvdánámadhye, &c.*

'Accept this golden throne, set with various gems and adorned with strings of pearls all for love of thee.'

Pádya.

Next water (*pádya*) is offered with the mantra:—*Gaurípriya namastestu śaṅkarapriya sarvadá bhaktyápádyaṅ mayádattan gṛiháṇa praṇatapriya.*—'Glory to thee beloved of Gauri, ever beloved of Sankara, accept the water presented by me thy poor worshipper.' Next the *argha* with the mantra:—*Vratamuddiśya deveśa gandhapushpáksh.tairyutaṅ gṛiháṇa arghaṅmayádattaṅ sarvasiddhipradobhava.*—'O lord of gods, accept this argha furnished with sandal, flowers and rice, grant my request, o chief of saints.'

Argha.

Then the ablution (*snána*) with the mantra:—*Snánaṅ pañchámṛitair deva gṛiháṇa gáṇanáyaka anáthanáthá sarvvajna gírváṇa paripújita, om gaṇánántwá gaṇapati gvan havámahe priyáṇántwá priyapati gvan havámahe nidhínántwá nidhipati gvan havámahe vasomama áhamajáni garbbhadhamá tvamajási garbbhadham.*—'O god, leader of the heavenly troops, protector of the defenceless, omniscient, thou that delightest in invocations, accept this ablution made with the five kinds of ambrosia.[1] *Om* thou who art leader of the attendants of Siva, thou who art lord of the beloved, lord of the treasures of Kuvera, dwell thou with me, &c.'

Snána.

Next sprinkle a little water with a spoon (*áchamaní*) on the image of Ganesha and proceed to clothe it (*bastra*) with the mantra:—*Rakta bastrayugaṅ deva devánʻgasadṛiśaprabham bhaktyádattaṅ gṛiháṇetaṅ lambodara harapriya:*—'O God Lambodar, beloved of Siva, accept these lawful scarlet garments, the gift of thy worshipper.' Then the *janeo* or sacrificial thread is placed on the image with the mantra—*Rájataṅ brahmasútrańcha káńchanasya uttaríyakam gṛiháṇa cháru sarvvajna bhaktánáṅ siddhidáyaka.*—'O giver of happiness to thy worshippers, omniscient, beloved, accept this royal garment of gold brocade and thread. Next sandal (*gandha*) with the mantra:—*Gandhaṅ karpúr saṅyuktaṅ divyaṅ chandanamuttamam vilepanaṅ suraśreshtha prítyarthaṅ*

Bastra.

Janeo.

Gandha.

[1] Milk, curds, butter, honey and sugar.

pratigṛihyatám.—'O best of gods, let this agreeable sandal mixed with camphor be accepted as an unguent for thy person, for the love I bear thee.' Next rice (*akshatá*) with the mantra:—*Akshatán dhavalán deva suragandharvvapújita sarvvadeva namaskáryya gṛihánamadanugrahát.*—'Thou who art worshipped by the gods, Gandharvas and all the deities, accept my offering of white rice.' Next flowers (*pushpáṇi*) with the mantra:—*Sugandhínisu pushpáṇi málatyádíni vaiprabho mayánítáni púјárthañ pushpáṇi pratigṛihyatám.*—'O Lord accept the sweet-smelling garlands and flowers brought by me for thy worship.' Then incense (*dhúpa*) with the mantra:—*Daśángañ guguláñ dhúpañ sugandhiñ sumanoharam umásutanamastubhyañ dhúpañ me pratigṛihyatám.*—'O son of Uma, accept the incense consisting of ten ingredients, 'bdellium, frankincense, fragrant grasses and very pleasing perfumes collected for thy honour.' Then a lamp (*dípa*) with the mantra:—*Gṛihána mangalañ dípañ ghṛitavarttisamanvitam dípañ jnánapradañ devarudrapriyanamostute.*—'Accept this lamp, supplied with clarified butter, the bestower of knowledge, established in thy honour, O beloved of the gods.'

Akshatá.

Pushpáṇi.

Dhúpa.

Dípa.

Then sweetmeats (*naivedya*) with the mantra:—*Sagurán saghṛitáñścha eva modakán ghṛitapáchitán naivedyañ saphalañ dattañ gṛihyatáñ vighnanáśana.*—'O thou who removest difficulties accept these sweetmeats cooked in clarified butter.' One of the sweetmeats should then be taken up and placed before the image of Ganesha, who should also receive some article of value. Then repeat the *múla*-mantra, which consists of a mental recitation (*jap*) of the formula *Om Ganeśháya namah*—'*Om*, glory to Ganesha.' Next *pán* (*támbúla*) is presented with the mantra:—*Púgíphalasamáyuktañ nágavallídalánvitam karpúrádisamáyuktañ támbúlañ pratigṛihyatám.*—'May this *pán* with betel and the leaves of the betel and spices be accepted.' When presenting the sweetmeats which are usually ten in number (hence the name *daśamodaka*) the following formula is used:—'I (so and so) for this (so and so) purpose bestow on this Brahman for the sake of Ganesha

Naivedya.

Pán.

these sweetmeats, rice, flowers and goods with this mantra:—*Vighnesa viprarúpeṇa gṛiháṇa daśamodakán dakshiṇaghṛitatámbúlagurayuktán mameshtada.*—'O Vighnesa (obstacle-lord), in Brahman form, accept these ten sweetmeats with the gifts, clarified butter and *pán* presented by me.' In reply the celebrant accepts the gift on the part of Ganesha and says:—*Dátá vighneśraro devo gṛihíta sarvvavighnaráttasmát idam mayádattam pari púrṇañ tadastume.*—Next follows the prayer (*prárthana*):—*Bináyaka namastubhyam satatam modakapriya avighnañ kurume devasarvakáryyeshusarvvadá.*—'Glory to thee Vináyak, fond of sweetmeats, always protect me from difficulties everywhere.'

Prárthana.

This is followed by an offering of a stalk of *dúb* grass with the mantra:—*Om gaṇádhiya namastestu om umáputra namastestu om aghanáśana namastestu om bináyaka namastestu om íśaputra namastestu om sarvasiddhipradáyaka namastestu om ekadanta namastestu om ibhabaktra namostu om múshakaváhana namastestu om kumáragurotubhyam namastestu om chaturthíśa namostute om káṇdátkáṇdát prarohanti parushaḥ parushas pari evánodúrve pratanu sahasreṇa śatenacha.*—'*Om*, glory to the lord of the heavenly hosts, the son of Uma, the remover of obstacles, Vináyak, the son of Isa, the bestower of happiness, the one-toothed, with an elephant's head, having a rat as his vehicle, to Skanda and Vrihaspat, to the lord of the fourth day, to these stalks of *dúb* budding at every knot with hundreds and thousands of shoots.'

Dúb.

Next follows the *nírájana* or waving of a lamp before the image, which is accompanied by the following mantra:—*Antas tejo bahis teja ekí krityámitaprabham áráttrikam idam deva gṛiháṇamadanugrahát, Om agnirjyotirjyotir agniḥ sváhá súryyo jyotir jyotiḥ súryyaḥ sváhá agnir varchcho jyotir varchchaḥ sváhá súryyo varchcho jyotir varchchaḥ sváhá súryyo jyotir jyotiḥ sváhá.*—'O god accept this ceremony of waving the light (*árátrika*) before thee who art light, hail to Agni who is light, to the Sun who is light.' Then follows the offering of flowers in the hollow of both hands (*pushpán-jali*) with the mantra:—*Sumukhaścha ekadantaścha kapilo gajakarṇakah lambodaraścha bikaṭo vighnanáśo bináyakaḥ ḍhúmra*

Nírájana.

Pushpán-jali.

keturgaṇádhyakshо bhálachandrogajánanah. This verse gives twelve names[1] of Ganesha and it is promised that whoever reads them or even hears them read when commencing to study or in making the preparations for a wedding, in coming in or going out, in war or in trouble will never meet with any obstacle that he cannot overcome. As the axe is to the jungle-creeper so this verse containing the names of Ganesha is to all obstacles and difficulties. Next comes the gift of money as an honorarium to the celebrant with the formula as in the first *sankalpam* and the usual definition of place, time, name, caste, &c., of the person who causes the ceremony to be performed and that it is for the sake of Ganesha. The celebrant in return on the part of Ganesha, asperses his client and places flowers, rice, &c., on his head, concluding with the mantra:—*Om gaṇánáñtwágaṇapati gvan havámahe priyáṇáñtwápriyapati gvan havámahe,* &c., as before.

Dakshina-sankalpam.

The ritual for the *Mátri-púja* comes into use after the service for Ganesha and usually forms a part of the preface to any other ceremony. The celebrant takes a plank and cleans it with rice-flour and

Mátri-púja.

[1] The usual names are Sumukh (beautiful faced), Ekdant (one-toothed), Kapil (red and yellow complexion), Gajakarnaka (elephant-eared) Lambodar (corpulent), Baikrit (misshapen), Vighnanása (deliverer from difficulties), Bináyaká (leader), Dhumra-ketu (smoke-bannered), Bhálachandra (better moon), Gajánand (elephant visaged), Ganadísa (lord of the celestial hosts). The following is a rough translation of the address:—

1. Whosoever shall worship thee under these twelve names and even whosoever shall attend and hear them read shall certainly prosper in this world.
2. Whosoever shall repeat these twelve names on the day of marriage or on the birth of a child, or on proceeding on a journey or on going to battle or in sickness or on entering a new house or business shall be freed from the effects of evil.
3. O Bakrtund, o Mahákáya, resplendent like a thousand suns, prosper my work always, everywhere.
4. O thou of the great body and short in stature, whose head is like that of an elephant. Thy breath like nectar attracts the insects hovering in the ether to thy lips. Thou art able with one blow of thy tusk to destroy the enemies of thy suppliants. Thou that art the adopted son of Devi hast vermilion on thy brow and art ever liberal. Thou art such o Ganesha that I bow to thee, the beautiful one of a yellow complexion and three-eyed.
5. Presenting this lamp I wave it before thee. Thou o Lambodar who art the ruler of the universe, the adopted son of Párvati, aid me.
6. All men worship thee and adore thy feet; thou that livest on sweets, and art borne on a rat and whose abode is magnificent, aid me.
7. Thou that bestowest wealth and accomplisheth the desires of thy worshippers, aid me.
8. Thou wieldest the trident and hast ever been merciful to me. Most assuredly all who worship thee shall obtain every happiness.

then draws sixteen figures representing the *Mátris* and to the right of them a figure of Ganesha. Then in the upper right-hand corner the sun is represented as in the Ganesha-*púja* and in the upper left-hand corner the moon by a number of lines intersecting a central point and having their extremities connected by a series of semi-circles. The celebrant then makes a brush from five or six stocks of *dúb*-grass and dipping it in cow-dung touches each of the figures which represent the *Mátris*. Then the *arghasthápanam, pránáyám* and *sankalpam* as in the preceding ceremony are gone through with the formula as to place, time, caste of celebrant, and object, &c., of the ceremony which is addressed to Ganesha and Gauri and the other *Mátris*. Then the latter are praised in certain verses[1] known as the *pratishthá*, then again in the *dhyánam* or meditation and again by name whilst presenting a flower to each :—" *Om gaṇapatayenamaḥ*," followed by Gauri, Padmá, Sachi, Medhá, Devasená, Svadhá, Sváhá, Mátri, Lokmátri, Dhriti, Pushti, Tushti, and the household female deities. The formulæ connected with the invitation, &c., in the preceding ceremony is then gone through, *viz.* :—*áváhana, ásana, pádya, argha, snána, áchamana, bastra, gandha, akshata, pushpáṇi, dhúpa, dípa, naivedya* and gifts. Next comes the *basoddhara*, which is performed by taking a mixture of clarified butter and a little sugar and having warmed it in the *argha*, letting it stream down the board some three, five or seven times. The celebrant then receives a piece of money from the person for whose benefit the ceremony is performed and dipping it in the clarified butter (*ghi*) impresses a mark on the forehead and throat of the person from whom he receives it and keeps the coin. Then comes the *níráján*a or waving of a lamp before the figures as in the preceding ceremony. Next follows the offering of flowers in the upturned palms of the hands (*pushpánjali*), winding up with a hymn in honor of the sixteen *Mátris* and gifts to the celebrant, who in return places flowers from the offerings on the head of the giver.

Pratishthá.

Basoddhara.

[1] Rice is here taken and sprinkled over each figure whilst the *pratishthá* is spoken and during the *dhyánam* the hands are clasped reverently in front of the breast and the head lowered and eyes closed.

Nándri śráddh.

The *Nándri or Nandi śráddh* is also called the *Abhyudika śráddh*, and though not universally observed here is sometimes introduced into the preparatory ceremonies. It opens with an invocation of Ganesha. The celebrant then draws a figure of a conch and discus on the ground and makes an *ásana* or throne of three stalks of *dúb*-grass, on which he places a *pátra* or small brass-vessel like a lotá and on it the *pavitra*.[1] Water, barley and sesamum are then applied, with appropriate mantras, and in silence, sandal, rice and flowers. The materials for the ceremony are then sprinkled with holy water whilst repeating a prayer. Next comes the *pránáyám*, a prayer for the presence of the deities in the house, a story of the adventures of seven hunters on the Kálanjar hill and the *sankalpam* or dedication. Then the enumeration of the ancestors for three generations on both the paternal and maternal side[2] and their adoration. This is accompanied by the invitation, &c., as in the preceding ceremonies for each of the twelve ancestors named and by special mantras which are too tedious for enumeration here.

Kalasa-sthápana.

The *kalasa-sthápana* or consecration of the water-pot is usually observed and commences with the washing of the *kalasa* or vessel with sandal, curds and rice and covering it with a cloth. Beneath it is placed a mixture of seven sorts of grain and then the person who causes the ceremony to be undertaken places his right hand on the ground whilst the celebrant repeats the mantra:—'*Om mahídyauḥ prithivíchana imaṁyajnaṁ mimíkshatám pipṛitánnobharímabhiḥ.*' Then barley is thrown into the vessel and a hymn is chaunted whilst water is poured over the vessel. Then the

[1] The *pavitra* is made from a single stalk of *kusha* grass tied in a knot of the form of a figure of eight. Each stalk has three leaves which some suppose are emblematic of the deity. [2] In the male line an addition is made to the name to show the degree: thus the father has the addition *basu svarúpa*, the grandfather that of *rudra svarúpa*, and the great-grandfather that of *aditya svarúpa*. Another addition is made to show the caste: thus a Brahman is called *sarmmah*, a Kshatriya is called *barmmah*, and a Vaisya or Sudra is called *guptah*. Amongst Brahmans the real names of females are not given: the first wife of a Brahman is called *sundari* and the second and others *mundari*. In other castes the real names are given as in the case of males. Thus Ramapati Brahman's father known in life as Krishnadatta would, at a ceremony undertaken by Ramapati, be called *Krishnadatta sarmmah basu svarúpa*, and Ramapati's mother, if the first wife of his father, would be called *Krishnadatta sundari basu svarúpa*.

kusha-brahma[1] is placed on it and sandal, *dúb*, turmeric, milk, curds, clarified butter, the five leaves (*pípal, khair, apámárg, udumbar* and *palás*), the earth from seven places (where cows, elephants, white-ants, &c., live), the five gems,[2] coin and articles of dress with appropriate mantras. Then Varuna is invoked and the water, &c, in the *kalasa* is stirred whilst these verses are recited in honour of the vessel :—'Vishnu dwells in thy mouth, Rudra in thy neck and in thy bottom Brahma : in thy midst dwell the company of the Mátris : within thee are the seven oceans, seven islands, the four Vedas and the Vedángas. Thou wert produced at the churning of the ocean and received by Vishnu, thy waters contain all places of pilgrimage, all the gods dwell in thee, all created things stand through thee and come to thee. Thou art Siva, Vishnu and Prajápati, the sun, Vasu, Rudra ; all the deities and all the Maruts exist through thee. Thou makest works fructuous and through thy favour I perform this ceremony. Accept my oblations, be favourable to my undertaking and remain now and ever with me.' Then the vessel is worshipped with praise and prayer to the same intent. Next the *arghasthápana, pránáyám* and dedication as in the previous ceremonies take place and again the *kalasa* is declared to be the abode of all the gods to whom the invitation, &c., as in the previous ceremony are given, *viz.* :—to Brahma, Varuna, Aditya, Soma, Bhauma, Buddha, Vrihaspati, Sukra, Sanaischar, Ráhu, Ketu, Adhidevatás, Pratyadhidevatás, Indra, the ten Dikpálas and the five Lokpálas. Then follows the waving of a lamp, offering of flowers and gifts with a dedication as before.

Rakshávidhána.

The ceremony of *rakshávidhána* commonly known as *rakshábandi* is seldom carried out in its entirety except by the wealthy. It consists in nding as an amulet a bracelet of thread on the right wrist and the rite commences with making a mixture of barley, *kusha*-grass, *dúb*-grass, mustard, sandal or red saudars, rice, cow-dung and curds, which is offered on a brazen platter to the bracelet forming

[1] This consists of fifty stalks of the grass tied together and separated at one end into four parts by pieces of the grass placed at right angles to each other and to the bundle itself. The projecting edges of these pieces prevent the bundle falling completely into the pot or vessel. [2] Gold, diamond, sapphire, ruby and pearl, but it may easily be supposed that these are seldom given.

its *pratishthá*. Then the person about to put on the bracelet invokes the presence of various deities to protect him from evil and says:—"To the east let Gobind protect me; to the south-east, Garurdhvaj; to the south, Váráha; to the south-west Nar Sinha; to the west Keshava; to the north-west Madhusúdana; to the north Sridhara, and to the north-east Gadádhar, above let Gobardhan protect me; below, Dharanidhar and in the ten quarters of the world Basdeo who is known as Janárdan. Let the conch protect me in front and the lotus behind; on the left, the club and on the right, the discus. Let Upendra protect my Brahman and Vishnu in his dwarf incarnation protect my Achárya; let Achyuta protect the Rigveda; Adhokshaja, the Yajurveda; Krishna, the Sámaveda, Mádho, the Atharvaveda and Aniruddh the other Brahmans. May Pundaríka protect the performer of the sacrifice and his wife and let Hari protect all defenceless places." The rubric goes on to say that the defence of the unprotected can always be effected by using mantras from the Vedas and the seeds of white mustard. In Kumaon a few coins are with turmeric, betel and white mustard seed tied up in a small bag (*potali*) of white cloth and attached to the *raksha* or bracelet until the work in hand, whether marriage or other ceremony, be accomplished. When this takes place the bag is opened and the contents are given to the officiating priest. The mantra commonly used in tying on the *raksha* is as follows:—"*Yena baddho bálárájadánavendro mahábalah tena twám abhibadhnámi rakshemáchalumáchala.*"

Játkarm.

The ceremony known as *játkarm* takes place on the birth of a son and is the next more important of those observed in Kumaon. It is divided into several sections which are considerably abbreviated in practice. The rite should be performed either on the day of the boy's birth or on the sixth day afterwards. If the father be at home, he should rise early and bathe in his clothes and make the dedication as already described for the boy's long life, health and wisdom. He should then worship Ganesha and make this his object that the boy should always be good, strong and wise, and that if the mother has become impure by violating any of the laws as to conduct or what should not be eaten, that

her sin should be forgiven her and its consequences should not be visited on her boy. With the same object he performs the *Mátri-púja* and the *Nándri-śráddh* already described. Sometimes the *Punyáhaváchana* follows, which is merely the citation, feeding and rewarding some Brahmans to be witnesses that the rite has been actually performed. The *Kalasa-sthápana* already described follows and after it the *naugrahan* or nine planets are invoked to be present and assist. A vessel of some bright material is brought, and in it is placed a mixture of clarified butter and honey, with which the tongue of the child is anointed either with a golden skewer or the third finger of the right hand, whilst a prayer is read asking for all material blessings for the boy. The father then presents a coin to the celebrant, who dips it in a mixture of clarified butter and charcoal and applies it to the forehead and throat of both father and son and then with a prayer places flowers on their heads. The father then takes the boy in his lap and touches his breast, head, shoulders and back, whilst appropriate mantras praying for strength for those parts of the body are read by the celebrant. A present is again given to the celebrant and after it the umbilical cord is cut, leaving four finger-breadths untouched. The *abhishek* or purification is then performed by asperging the assemblage with a brush formed from *dúb*-grass and dipped in the water of the *argha*. The frontal mark is then given with red sandars and a flower is presented with a verse committing the donee to the protection of the great god.

Shashthí-mahotsava.

The *Shashthí-mahotsava* or great rejoicing in honour of Shashthí is held on the sixth day after the child's birth. If the father cannot afford to engage the services of a priest he can perform the ceremony himself, but usually he sends for his *purohit* and commits its duties to him. The father rises early and bathes, performing the *nitya-karm* as usual. He fasts all day and towards evening makes a ball of clay and smears it with cow-dung. He then takes a plank of wood and having cleaned it with rice-flour draws on it images of Skanda, Pradyuman and Shashthí. He then surrounds each figure with a hedge of cow-dung about a finger-breadth high and sticks upright in this hedge grains of

barley. The image of Shashthí is then smeared with cow-dung in which cowries or coins are placed, which is followed by the *Dwára-mátri-púja*. The father of the boy collects the materials for worship near the door of the house and there drawing the figures with rice consecrates an *argha* and dedicates the rite to the day's ceremony. The goddesses are then installed :—' *Om bhúrbhuvahsvah Dwára-mátris* be established here and grant our reasonable desires.' Then a short meditation takes place followed, by an ' *Om*, hail' to Kumári, Dhanadá, Nandá, Vipulá, Mangalá, Achalá and Padmá, and the usual invitation, &c., as far as the dedication. Next comes the Ganesha-*púja* with rinsing of the mouth and a dedication, then the *Mátri-púja* with similar detail, the *Punyáha-váchana* and *Kalasa-sthápana* with an invitation to the nine planets to be present. The worship of Skanda and Pradyuman then proceeds with the usual installation address (*pratishthá*), meditation, invitation, &c., and prayer (*prárthana*) during the offering of flowers. This is followed by the *Shatkrittika-púja* or worship of the six nymphs, the foster-mothers of Skanda, with an enumeration of his names and an invocation to Siva, Sambhúta, Sannata, Príta, Anusúya and Kshama. Next comes the worship of Shashthí with the usual consecration of the *argha*, *pránáyám*, dedication and installation.

The *pratishthá* in honour of Shashthí is as follows :—" *Om bhúr bhuvah svah* (*vyáhriti-mantra*), o Shashthí-devi, come here to this magical place which is smeared with cow-dung, remain here, consent to be honoured here. Then follows the unintelligible mystical formula ॐ आँ ह्रीं क्रौँ यँ रँ लँ वँ शँ षँ हँ चँ हंसः सोहं followed by " May Shashthí-Devi in spirit and essence be here and may the regents of all the senses be present." The mental assignment of the different parts of the body to its own peculiar tutelary deity (*nyása*) follows and should be made with the following formula :—*Om khá*, glory to the heart; *Om khí*, to the head *sváhá*, (here meaning ' Hail') ; *Om khú*, to the top-knot, *vashat* (here meaning ' Hail') ; *Om khai*, to the mystical armour of the mantra, *hún ; Om khau*, to the eyes, *vaushat* (like *vashat*) ; *Om kha*, to the mystical weapon of the mantra, *phat*. This differs little from the *Anganyás* formula. Then follows the meditation on Shashthí as Mahá-devi,

of the large breasts, four-armed, the consort of Siva, swollen out like a peacock, clad in yellow clothes, beautiful, bearing a lance in her hand, Mahesvari, &c. The above fairly represents the character of the mantras used in the ceremonies and that these are of Tántrika origin and common alike to Buddhism and the Hinduism of the present day may be distinctly shown. Cunningham in his Ladák (p. 384) gives several mantras collected by him from Tibeto-Buddhist sources which in form and character are the same as those in use in the Kumaon Himálaya. Compare his mantra of Shakya Thubba (Buddha) :—*Namaḥ Sámanta buddhánám sarva-klesha nishuddhana sarvva dharma vahiprapta gagana sama sama sváhá*—'glory to the chief of Buddhas, reliever of all suffering, master of all virtue, equal, equal to the heavens, hail.' Again we have :—*Namaḥ sámanta vajránám chanda maha roshana hún*—"glory to the chief of Vajras, fierce and greatly hungry, hail" ; and :—*Om vajra—krodha, háyagriva hulu hulu hún phat—Om* o wrathful Vajra, flame-necked, *hulu hulu hún phat.* This last 'is addressed to the supreme Buddha (Bhageswara), to the celestial Bodhisattwas, Padmapáni and Vajrapáni (the lotus and sceptre bearers) and to the Tántrika divinity Iswara.' The same ideas permeate the mystical formulæ used by Musalmáns of the lower classes, descendants of Hindú converts, only the names of Jibráil, Azráil, &c., are used instead of the names of the Indian and Tibetan spell compelling deities. After the worship of Shashthí has been finished a garland of sweetmeats is thrown around the neck of a male kid. The ears of the kid are pulled until it bleats loudly some five or six times in order to frighten and drive away the evil spirits who are supposed to seek to disturb the ceremony. Shashthí is again addressed to protect the boy from evils by flood or field, by hill or dale, from wild animals by night or day ; whilst the father takes the child in his lap and again touching the several parts of the body listens to the appropriate prayers for strength, wealth and long life. The ceremony ends with a story illustrating its origin.

Námkarana.

The *námkarana* or naming the child takes place on the tenth to the twelfth day after birth. In Kumaon, it is held almost universally on the eleventh day. The ritual opens with a series of somewhat abstruse general rules for selecting names, the actual practice with regard to which

is noticed elsewhere. The Ganesha-*púja* is as usual first performed, stating the particular object for which it is undertaken. Then follows the *Nándri-śráddh* and an oblation to the fire made with clarified butter. Then a mixture called the *pancha-gavya* is formed of the following ingredients :—the urine of a slate-coloured cow, the dung of a black cow, the milk of a copper-coloured cow, the curds of a white cow and the clarified butter of a pie-bald cow. This mixture is made up into small balls and a portion used as a burnt-offering (*homa*) and the remainder is strewn about the house and byres and also thrown on the mother of the boy to purify her. A *homa* is then made of coins which are thrown into the fire and afterwards become the property of the celebrant. The child's name is next settled and written on a small piece of clean cloth and also whispered in his ear :—"Thy name is so and so, may thou have long life, health and prosperity." Gifts are then made to the celebrant and all retire to the courtyard, where a figure of the sun such as already described is drawn on the ground and reverenced with the usual ceremony. The boy is allowed to see the sun this day and is made to plant his foot on a piece of money placed on the ground (*bhúmi upavesanam*) whilst calling on the names of the deities that hereafter he may be able to esteem money as the dirt under his feet. The party then return to the house, where the *jíva mátri-púja* is performed. It consists in the rinsing of the mouth followed by the consecration of the *argha* and a dedication as in the *mátri-púja*, but the figures are only seven in number and are drawn on the wall of the house, not on wood, and the deities honoured are Kalyáni, Mangalá, Bhadrá, Punyá, Punyamukhá, Jayá and Vijayá. These are worshipped with the usual ceremonies including the invitation, &c., and the *basoddhara* already described and then gifts are made to Brahmans.

Janmotsava.

The *janmotsava* takes place on the anniversary of the birth of a male and the ceremony connected with it may be performed either by the person whose birth-day is celebrated or by the family *purohit* on his behalf. In either case the person for whose benefit the rite is performed must rise early in the morning and have his body anointed with a mixture of sesamum, black mustard and water and then bathe in warm water and put on clean clothes. When

bathing, a prayer is read which brings in the place and date, his name, caste and race, and asks for long life and prosperity, and to be truly effective this prayer should be said when the past year of the native's life merges into the coming year. Then the names of the principal deities are repeated in the form of a short litany and their aid and assistance during the ensuing year are invoked. Should the anniversary fall on a Tuesday or Saturday which are regarded as unlucky days, the ceremony cannot take place, but in its stead, the person who desires to derive benefit from the rite should bestow gifts on Brahmans and in charity and in this way he shall obtain all the advantages which the performance of the complete ceremony is supposed to ensure. It is only in this abbreviated form, moreover, that the majority of Hindus in Kumaon observe this rite.

Karnbedh.

The *karnbedh* or piercing the ear may, according to the family or tribal custom, take place at any time between the third and seventh year. The rite is said to have been established by Vyása and the date for its performance is always fixed by the family astrologer. The father of the boy must rise early and perform the Ganesha-*púja* and state precisely the object by giving place, time, name, &c., and declaring that it is for the increase in length of life, strength, wisdom and good fortune of his son, whose name is also given. He then goes through the *Mátri-púja*, *Nándri-śráddh*, &c., as in the preparatory ceremonies already described. The mother takes the child in her lap and gives him sweetments whilst the operation of piercing the ear is performed: first the right and then the left ear with appropriate mantras, winding up with the usual gifts to the astrologer and *purohit*. Then follows the *abhishek* or aspersion and the presentation of flowers and the *mahánírájana*, in which the family barber appears with a brazen tray bearing five lamps made of dough, four at the corners of a square and one in the centre in which the wick floats in molten clarified butter. These are waved in the manner of a censer in front of the assembly, who each make an offering to the barber according to his ability.[1]

[1] I omit the ceremony styled *Aksharasvíkára vidyárambhau*, which takes place when a boy first goes to school, as it is not in general use. It consists principally of an enumeration of all the books, teachers and schools of philosophy known to the compiler with laudatory verses and prayers that they should be present and assist in the ceremony and in the youth's studies.

The *Upanayana* or ceremony of putting on the *janeo* or sacrificial thread is always preceded by the worship of the planetary bodies. For this purpose a *yajnasála* or hall of sacrifice is prepared to the east or north of the house and purified with the *panchagavya*,[1] whilst prayers are read as each article of the mixture is used. As a rule, however, the ceremony is performed in the cow-shed, in the northern corner of which a very simple miniature altar of three steps[2] known as the *grahabedi* is raised. On the top of the altar the figure of a lotus with eight petals is drawn and each petal is coloured to represent a planet, red for the sun; white for the moon; reddish-brown for Bhauma (Mars); whitish yellow for Budh (Mercury); yellow for Vrihaspat or Guru (Jupiter); white for Sukra (Venus); black for Saníchar (Saturn) and for Ráhu (an eclipse) and brown for Ketu (a comet). For the other deities the intervals between the petals are used. Offerings of rice and curds are then made to each and the usual invitation, &c., are made. On the morning of the day after these preparations have been completed, the usual preparatory ceremonies already described are gone through, including the *Nitya-karm*, Ganesha-*púja*, Mátri-*púja*, *Nándri-srádáh* and *Punyáha-váchana*. Then the person who causes the ceremony to be performed gives the *tilak* or frontal-mark to the *purohit* also the *argha*, flowers, rice, sandal and presents of coin, ornaments and wearing apparel and requests him to preside at the ceremony.[3] The parents of the child with the celebrant and the assembled friends then march round the *yajna-sála* to the sound of conches and other instruments and enter by the western door, when the ceremony of purifying the hall with the *panchagavya* is again performed. To the south-west of the *grahabedi* a small *homa-bedi* or altar for burnt sacrifice is built and a fire is lighted thereon.

Worship of the planets.

The celebrant then performs the *Kalasa-sthápana* and appoints the *pradhán-díp* or guardian of the lamp to stand in the east and prevent the

The worship.

[1] Already described. [2] The lowest step is two finger-breadths high and broad, the next is of the same height but four finger breadths broad, and the last is four finger breadths higher than the second and one cubit square at the top. [3] Arrangements are made in the ritual for the presence of the Achárya. Brahman, Ritwik or prompter and Sadasya, but as a rule all these offices are performed by one person. The ritual for this ceremony extends over eighty pages of my manuscript and is said to occupy three days in recital.

lamps going out, lest the ceremony should be interrupted by sprites and goblins. The worship commences by the celebrant presenting to each leaf of the lotus on the *graha-bedi*, a piece of metal stamped with the conventional image of the particular planet to which the leaf is sacred. (Then the greatness of each planet is praised and litanies are read and each is invited to be present in the place assigned to it on the *graha-bedi*.) All face towards the sun and the figure of the sun towards the east. These are then addressed in the *Agnyuttáranam-mantra* and then washed with the five *amrita*, each ingredient as it is applied being accompanied by a separate mantra. Then cold-water is offered and the dedication made with the hymn of praise to:—Om kár, Brahmarishi, Gáyatri, Chhandah and the supreme deities; the Vyáhriti-mantra, Visvámitra, Jamadagni, the metres known as the *gáyatri, ushnih* and *anushtubh* and the deities Agni, Váyu and Súryyá, who are asked to assist in the ceremony. Then the *vyáhriti*-mantra is recited separately and together thus:—*Om bhú* I invite and set up the sun; *om bhuvah* I invite, &c.; *om svah* I, &c.; *om bhúrbhuvahsvah*, I, &c., and the figure of the sun is placed on a small circular altar erected in the middle of the *graha-bedi*, then the invitation is made with the mantra:—*Om akrishne*, &c. Next Agni is addressed as *adhideva* of the sun and invited to be seated on his right hand with the *vyáhriti*-mantra separately and together as in the case of the sun and also a special mantra for the invitation:—'*Om Agnim dútam*,' &c. Next on the left side Rudra is invited as the *pratyadhi deva* in the same manner and the invitation mantra commences:—'*Om tryambakam*,' &c. Next in the south-east corner the figure of Soma is set up with a similar ceremony on a small square altar. Next comes Angáraka or Bhauma on a triangular altar, Budh on an arrow-shaped altar, four finger-breadths long, Guru or Vrihaspati on an altar six finger-breadths square, Sukra on a five-cornered altar, nine finger-breadths across, Sani on a bow-shaped altar two finger-breadths broad, Ráhu on a sword-shaped altar, and Ketu on one like a standard. Then the other deities are invited: first the protecting deities, Ganesha, Durga, Kshetrapál, Váyu, Akásha, and Aswini. Then the guardians of the rite, Indra on the east, Agni on the south-east, Yama on the south, Nirriti on the south-west, Varuna on the west, Váyu on

the north-west, Kuvera on the north and Isa on the north-east. Next Brahma is invited to take his place in the upper part of the central space on the *graha-bedi* and Ananta in the lower portion. Next in the north-eastern corner already sacred to Isa, the *Kalasa-sthápana* is made and the figure of Varuna is placed on the cover over the mouth of the vessel. All this is done with the same tedious ceremony.

The meditation.

The thread from which the bracelet is made (*rakshá-sútra*) is now tied round the neck of the vessel (*kalasa*). Then rice is taken in the hand and sprinkled over all the figures whilst they are asked to come and take their place in the vessel and in the bracelet. Then follows the dedication of the rite to the ceremony about to be performed on behalf of the boy. Next the *dhyána* or meditation is given :—"*Om* who sittest in the position called *padmásana* (*i. e.*, with thighs crossed, one hand resting on the left thigh and the thumb of the other on the heart and the eyes looking towards the nose), with hand like a lotus, sprung from a lotus, who driveth the chariot yoked with seven steeds, two-armed, ever present *Ravi*. *Om* thou who art white clothed in white garments, driving white horses, adorned with white, bearing a club, two-armed, ready to do what is right, *Sasi*. *Om* thou with the reddish garland and clothes, bearing a pike, lance, and club, four-armed, moving like a goat, granter of requests, *Dhará-suta*. *Om* thou clothed in yellow garments encircled with yellow garlands, sprung from the pericarp of the lotus, club-holder, two-armed, seated on a lion, granter of requests, *Budha*. *Om* Guru of the Devas and Daityas, clothed in white and yellow, four-armed, who grantest the wishes of ascetics, with rosary, thread and alms-dish. *Om* thou who shinest like a sapphire, holding a lance, granter of requests, vulture-borne, arrow-discharger, *Arka-suta*. *Om* thou that art clad in blue, whose body is blue, crested with a diadem, bright, seated on a blue lion, such a *Ráhu* is praised here. *Om* thou who art of a brown colour, two-armed, club-wielder, with distorted face, always mounted on a vulture, grantor of desire, *Ketu*." A second meditation to the same import is then prescribed and others for Varuna, &c. Then to all the deities named the *ásana*, &c., as far as the flower-offering are given and Vyása is quoted in praise of the nine planets. When

procurable, cocoanuts should now be offered with fruit, flowers, and goods as well as the food supposed to be agreeable to each deity: thus for the sun, balls of rice and molasses are provided: the moon receives a *bali* of rice, clarified butter and milk; Bhauma, one made of rice, molasses, clarified butter and milk (*utkarika*); Budh, one made of milk and rice; Vrihaspati, simply clarified butter and rice; Sukra, curds and rice; Sani obtains a mixture of rice, clarified butter and vegetables; Ráhu has goat's flesh; Ketu, rice of various colours; whilst the remainder obtain milk and rice. If these different ingredients are not procurable an offering of milk and rice is made to all.

Consecration of the materials for sacrifice.

The celebrant then approaches the *homa-bedi* and looking towards the east makes the usual rinsing of the mouth and then proceeds through the whole ceremony of consecrating the materials for the sacrifice from the appointment of the Brahman (*brahmopavesana*) to the general aspersion (*paryukshana*), after which gifts are made to the celebrant. A kind of preface is then read giving the names of the several deities and the materials with which they should be worshipped. This is followed by the *Agni-sthápana* by which Agni is invited in the different forms in which he is present on the altar as each of the nine planets receives worship and the throne, &c., are presented to him. Lines which represent the tongues of flame on the altar are then drawn and adored and the father of the boy receives fire from the celebrant and bending the right knee so as to allow the thigh to lie flat on the ground before the altar, meditates on Prajápati, and commences the burnt-sacrifices by the offer of the *ághárav-homa* with clarified butter. Fuel[1] (*samidh*) for the altar is supplied from the wood of the following trees and plants :—*Arka* (*Calatropis gigantea*), *Palás* (*Butea frondosa*), *khair* (*Acacia catechu*), *Apámárg* (*Achyranthes aspera*), *pípal* (*Ficus religiosa*) and *Udambar* (*Ficus glomerata*), *samí* (*Acacia suma*), *dúb* (*Cynodon Dactylon*) and *kusha* (*Eragrostis cynosuroides*). These pieces of wood and plants must not be crooked, broken, worm-eaten, &c., and must be steeped in curds, honey and clarified butter before they are offered to the nine planets as a *homa*. If the wood

[1] The wood of these trees is supposed to be cut up into pieces measuring a span of the hand of the boy who is the subject of the rite. Three stalks of *dúb* or *kusha* make one *samidh*.

of the other trees mentioned is not procurable that of the *palás* or *khair* may be used alone. There are three positions for the hand during the homa:—(1) the *mrigí* (doe), (2) the *hansí* (female swan) and (3) *súkarí* (sow). In the *súkarí* the hand is closed and the fingers lie in the palm of the hand; the *mrigí* extends the little-finger whilst the remaining fingers continue within the palm of the hand, and the *hansí* extends the fore-finger whilst the hand is closed. The *mrigí-mudra* comes into use in all ceremonies undertaken in order to avoid threatened dangers or the retribution due to evil deeds: the *hansí-mudra* in the rites observed for increase in health, wealth or prosperity, and the *súkarí-mudra* in spells for malevolent purposes, in incantations against an enemy and for causing any mental or bodily misfortune to him. If the *homa* takes place without its proper spell (*mudra*) the offering is fruitless and misfortune shall assuredly occur to both the celebrant and his client.

The oblation.

The *homa* is then offered in the name of each deity with a short dedication and mantra whilst the name of the presiding Rishi supposed to be present is given as well as the form of Agni. As this ceremony is gone through forty-two times, the result may be tabulated as follows:—

The nine planets.

No.	Name of deity.	Material employed in the *homa*.	Initial words of mantra.	Presiding Rishi.	Form of Agni.
1	Sun ...	*Arka* ...	*Om Akrishne*, &c.	Hiranyastúpa.	Kapila.
2	Moon ...	*Palás* ...	*Om imam devâh asapatna gvan*, &c.	Gautama.	Pingala.
3	Bhauma ...	*Khair* ...	*Om agnimurddhá*, &c.	Virúpáksha.	Dhúmraketu.
4	Budha ...	*Apámárg* ...	*Om udbudhyasvágne*, &c.	Parameshthi.	Játhara.
5	Vrihaspati,	*Pípal* ...	*Om vrihaspate*, &c	Gritsamada.	Sikhi.
6	Sukra ...	*Udambar* ...	*Om annát parisrutorasam*, &c.	Prajápati, Asvi, Sarasvati and Indra.	Hátaka.
7	Sani ...	*Sami* ...	*Om sannodevírabhishtayah*, &c.	Dadhyangátharvan.	Maháteja.
8	Ráhu ...	*Dúb* ...	*Om kayánaschitra*, &c.	Vámadeva.	Hutásana.
9	Ketu ...	*Kusha* ...	*Om ketum*, &c.	Madhuchhanda.	Rohita.

The Adhidevatás.

For these and the succeeding deities *palás* is the wood prescribed and no particular form of Agni is mentioned.

Number.	Name of deity.	Initial words of mantra.	Presiding Rishi.
10	Agni ...	*Om agnim hútam*, &c. ...	Kanva and Medhátithi.
11	Apa ...	*Om apovantara*, &c. ...	Vrihaspati.
12	Prithivî ...	*Om syonáprithivi*, &c. ...	Medhátithi.
13	Vishnu ...	*Om idamvishnurvichakrama*, &c.	As in 10.
14	Indra ...	*Om sajoshâh*, &c. ...	As in 4.
15	Indráni ...	*Om aditya*, &c. ...	Ditto 7.
16	Prajápati ...	*Om prajápáte*, &c. ...	Hiranyagarbha.
17	Sarpa ...	*Om namostu sarpebhyo*, &c....	Devárishis.
18	Brahmá ...	*Om brahmayajnánam*, &c. ...	Prajápati.

The Pratyadhidevatás.

19	Rudra ...	*Om tryambakam*, &c. ...	Vasishtha.
20	Umá ...	*Om srischate lakshmi*, &c. ...	Uttaranáráyana.
21	Skandá ...	*Om yadakrandah prathamam*, &c. ...	Bhárgava, Jamadagni and Dirghatamasa.
22	Purusha ...	*Om sahasra sirshapurushah*,&c.	Asyanáráyana.
23	Brahmá ...	*As in* 18 ...	As in 18.
24	Indra ...	*Om trátáram indram*, &c. ...	Gârgya.
25	Yama ...	*Om asiyamoh*, &c. ...	As in 21.
26	Kála ...	*Om kárshirasi*, &c. ...	Ditto 15.
27	Chitragupta ...	*Om chitrávaso*, &c. ...	Ditto 4.

Other deities.

28	Vináyaka ...	*Om ganánámtwá*, &c. ...	As in 18.
29	Durga ...	*Om játavedase*, &c. ...	Kasyapa.
30	Váyu ...	*Om vátová*, &c. ...	Gandharvás.
31	Akásha ...	*Om urddhváh*, &c. ...	As in 18.
32	Asoman ...	*Om yávánkusa*, &c. ...	Medhátithi.

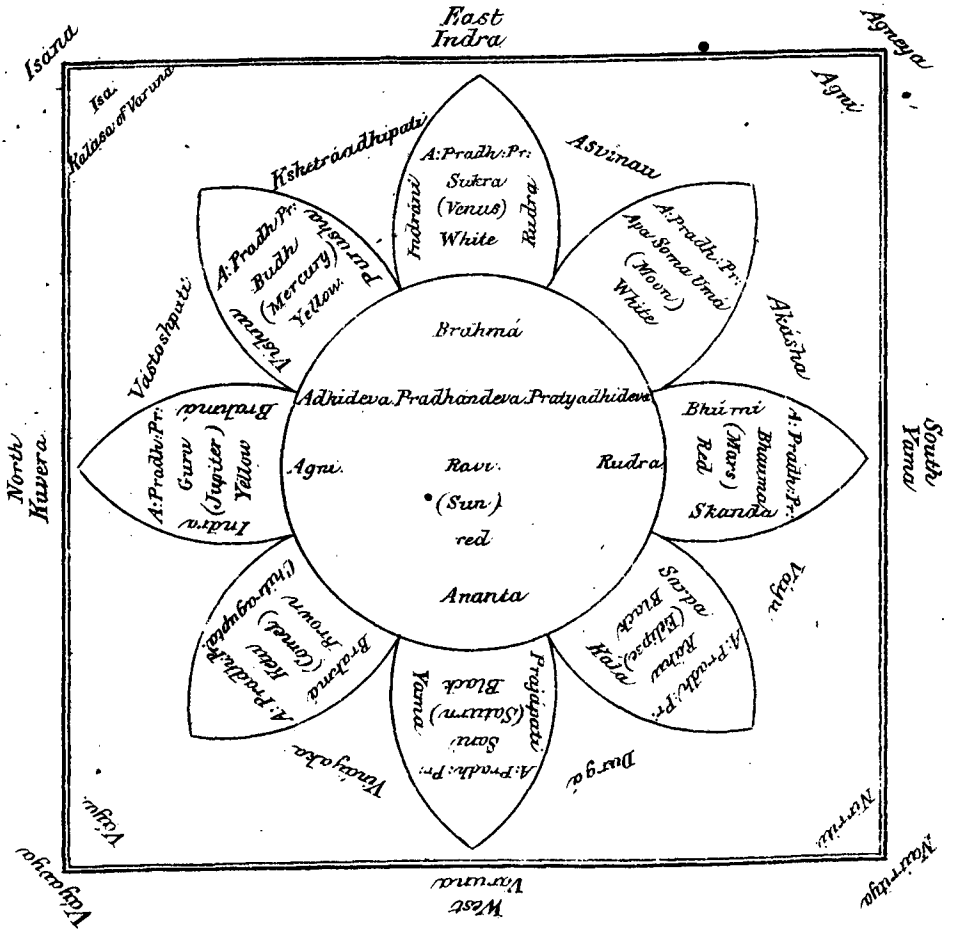
Dikpálás.

Sesamum and clarified butter are here added to the offering of *palás*.

33	Indra ...	As in 24 ...	As in 24.
34	Agni ...	Ditto 10 ...	Ditto 3.
35	Yama ...	Ditto 25 ...	Ditto 21.
36	Nirriti ...	*Om eshate nirrite*, &c. ...	Varuna.
37	Varuna ...	*Om imamevaruná*, &c. ...	Sunahsepha.
38	Váyu ...	As in 30 ...	As in 30.
39	Kuvera ...	*Om vaya gvan*, &c. ...	Bandhurishi.
40	Isána ...	*Om tamísánam*, &c. ...	Gautama.
41	Brahmâ ...	As in 18 ...	As in 18.
42	Ananta	Ditto 17 ...	Ditto 17.

Should any error occur in naming the deities in the order above given, the entire ceremony must be gone through again, but no penalty is attached to the use of the materials for the *samidh* in other than the prescribed form.

The position assigned to each deity on the *graha-bedi* will better be understood from the following diagram. In the petals of the lotus, the letter 'A' stands for 'Adhideva': the letters 'Pradh' for 'Pradhándeva' and the letters 'Pr.' for 'Pratyadhideva,' the titles given to each triad:—



We have next a *homa* of clarified butter with the *vyáhriti*-mantra repeated nine times: hence the name *navahuti-homa*. Another offering of clarified butter is made with the mantra:—'*Om* to Agni who causeth a good sacrifice *sváhá*.' Then a *púrna-pátra*, or vessel, is presented to the celebrant with a dedication that

all imperfections in the ceremony may be forgiven and the rite be completed. The *baliyadán* follows and comprises offerings of milk or rice and curds to the north of the *graha-bedi* or near the *homa-bedi*. A portion of the mixture is taken and placed on a brazen platter or stone in the name of the sun with the address:—'*Bhó bhó* Sun accept this offering; be thou the bestower of long life, the giver of forgiveness, the alleviator of trouble, the giver of good fortune and the increaser of prosperity to thy worshipper.' Above this an offering is placed for the moon with the same address and so on for each of the forty-two deities assembled and to whom a *homa* has been offered. It will be noticed that a *homa* is not offered either to Kshetrapál or Vatoshpati. To the former, however, a *bali* is presented with considerable ceremony; a mixture of clarified butter and rice known as *khichri* is placed on a platter of leaves and on it four lamps of wheaten dough with clarified butter for oil and a few coins. Then an ignorant Brahman or a Sudra is honoured with an offering of sandal which, as a rule, is smeared over his face to make him look hideous. The *dhyána* or meditation on Kshetrapál follows, after which the offering is taken and presented with the mantra.[1] "Om glory to the venerable Kshetrapála * * * to all sprites, goblins, demons and their followers, glory to this offering of clarified butter and rice with its lights, gifts and betel. Hail Kshetrapála * * filled with the howling of the fierce-mouth protect me, eat this offering of *khichri* with its light prepared for thee. Protect the person who causes this ceremony to be made, be for him and his child and those belonging to him the bestower of long life," &c.

Baliyadán.

After this follows the *púrnáhuti-homa* in which Bharadvája is the Rishi and the deity is Mahávaisvánara. The offering is prefaced by the usual dedication of time, place, person and object, followed by the hymn in four verses beginning:—'*Om múrddhánam divo,*' &c., and ending with '*Om púrná,*' &c., whence the name. The *Agni púja* comes

Púrnáhuti-homa.

[1] *Om namo bhagavate kshetrapáláya* क्षां क्षीं क्षूं क्षें क्षौं क्षः *bhútapretapiśácha-ḍákinīśákini betáládi parivárayutáya esha sadípaḥ sadakshiṇaḥ satámbúlaḥ kṛisaránna balirnamaḥ bho bho kshetrapála maru maru, turu turu lala lala shasha shasha phenkárapúrita din-mukha r aksha raksha grahamakhakarmmaṇi amuñsadápañ kṛisaránnabalim bhaksha bhaksha yajamánañpáhi* (bis) *mamavá saputra saparivárasya yajamánasyavá, &c.*

next in which Agni is addressed on behalf of the boy :—'*Om* Agni thou that protectest the body, protect my body ; *Om* Agni that grantest long life grant me long life ; *Om* Agni that bestowest energy bestow on me energy ; complete whatever is deficient in my oblation ; *Om* holy Savitá accept my sacrifice, holy Sarasvati accept my sacrifice ; ye twin Asvins, crowned with lotuses accept my sacrifice.' Then warming his hands in the flame of the altar he applies them in succession to the various parts of his body saying :—"May each member of my body increase in condition." Similarly the mouth, nostrils, eyes, ears and arms are separately addressed to the same intent. After this the rite called *tryáyusha* is celebrated. It consists in the application of the *tilak* or frontal mark to the head and throat of both the boy for whom the ceremony is performed and his father. The material for the *tilak* is taken from the ashes of the *homa* and then mixed with clarified butter and applied by the celebrant. This is followed by the distribution of gifts which are divided amongst all the Brahmans present. But in addition to the ordinary presents suitable to the occasion, the wealthy and devout are instructed that the following are specially acceptable to each of the nine planets :—to the sun, a brown cow ; to the moon, a conch ; to Bhauma, a red bullock ; to Budh, gold ; to Vrihaspati, yellow clothes and gold ; to Sukra, a white horse ; to Sani, a black cow ; to Ráhu, a sword, and to Ketu, a goat. These subsequently become the property of the officiating priests, but it is allowed to commute these gifts in detail for a sum of money which is made over to the priests with the usual dedication of place, time, person and object, and that the money is in lieu of the gifts due to each of the nine planets. All then march around the altar singing :—"*Om*, go, go, best of gods, ómnipotent in thy own home, where Brahma and the other gods are, there go thou Hutásana." The planets are then worshipped and afterwards the celebrant and his assistants asperges the assembly with water taken from the *kalasa* whilst chaunting a hymn[1]. This is followed by a mantra[2] in which all the deities are invoked that the aspersion may be fructuous and

Agni-pújo.

Tryáyusha.

[1] This is called a Vaidik hymn and commences :—'*Om sarvvesamudráḥ saritas tírthání jaladánadáḥ*,' &c. ; it contains thirty-four verses. [2] Called Paurá-nika-mantra.

their protection be extended to all. The *tilak* of sandal is then given by the celebrant to the men of the assembly with the mantra[1]:—"*Om*, may it be well with thee, be thou fortunate; may Mahálakshmí be pleased with thee; may the gods always protect thee; may good fortune be always with thee everywhere; may evil planets, sins, impurities and causes of quarrel seeing the mark on thy forehead be powerless to harm thee." The rice is applied with the mantra:—'*Om* may this rice protect thee.' The *tilak* is given to women merely as an ornament without any mantra, but the rice is applied with the mantra used for men. The mantra-*páthah* follows, of which twenty-one verses are for the men and three for the women whose husbands are alive at the time; when finished, flowers are distributed to all present. After this the ceremony of fastening on the bracelet (*rakshábandhan*) takes place as described and the *bhúyasi-danam* with its gifts in which all the dancers and the musicians share. The worship of the planets concludes as usual with a feast to Brahmans.

Chúrákarana.

The rite known as *chúrákarana* or shaving of the head is also included amongst those preparatory to the assumption of the sacrificial thread. The favourable moment is fixed by the family astrologer and when arranged for, the father of the boy commences the rite the night before by going through the Ganesha-*púja*. He then takes ten small bags of cloth and wrapping up in them portions of turmeric, *dúb*-grass, mustard and a coin, ties them in the hair of the boy with the mantra:—'To-morrow you will be cut off,' &c. Three are tied on the right side of the head, three on the left side, three at the back of the head and one on the top. The next morning all proceed to the *yajnasála* in which the *graha-bedi* of the previous ceremony was erected. The duties of the day are opened with the rinsing of the mouth, next the *argha* is set up and consecrated and the *pránáyám* is gone through followed by the dedication.

In the last rite, the celebrant defines the object by stating that the ceremony is performed for the *chúrá-karana* and *upanayana* of so and so, the son of so and so, &c. Next follow the whole of the usual preparatory ceremonies as far as the *Punyáha-váchanam*. The celebrant now approaches the *chúrá-karana-bedi* and again

[1] *Om bhadramastu*, &c.

consecrates the *argha* and makes a dedication to Agni and then lights a fire upon the *bedi* or altar. The father now takes the boy in his arms and the mother seats herself to his left and all assist in the installation of the altar and the invitation, &c., is gone through as before. Then an offering of clarified butter is thrown on the fire with the mantra:—'*Om prajápataye,*' &c., and gifts are bestowed on the celebrant. The hair of the child, except the top-knot, is now cut off whilst an appropriate service is read. The hair is then buried with cow-dung near some water and the boy is bathed and clothed in his best and placed near the celebrant and is held to be entitled to the name *mánavak* or religious student. The ceremony as usual winds up with gifts to the celebrant and assembled Brahmans, replied to by a mantra and the gift of a flower (*asisham*).

Assumes the garb of a student.

According to the *Páraskarasútra,* the son of a Brahman may assume the *janeo* at seven or eight years of age, the son of a Kshatriya at eleven years of age and the son of a Vaisya at twelve years. These limits can be doubled where necessity exists, but the ceremony cannot take place after the second limit has expired. The father and son now approach the *upanayana-bedi* and the boy presents the *tilpátra* to the altar. This *tilpátra* is an iron pot containing sesamum oil in which coins have been placed and which form a portion of the honorarium of the celebrant. The invitation, &c., is again recited and the dedication is made to ensuring the success of the young student in his studies. Next follows a formal burnt-sacrifice of clarified butter. The celebrant then receives from the father of the boy a loin-cloth, belt, sacrificial-thread, waist-thread, walking-stick and bason for receiving alms and gives them one by one to the boy with a mantra for each. Separate woods are prescribed for the walking-stick according to caste; for the Brahman, *palás;* for the Kshatriya, *bel;* and for the Vaisya, *gular.* The celebrant then asperges the head and breast of the boy and accepts him as one duly prepared and fit to be raised to the degree of a religious student. The boy next seats himself to the north of the celebrant and his father goes through the Agni-*púja* and offers a sacrifice of clarified butter and presents gifts to the Brahmans. The title *bat* is given to the student who has assumed the sacrificial

thread. The astrologer fixes the *lagnadán* or propitious moment for repeating the *gáyatri*, and when it comes the boy seats himself in front of the celebrant and turning his face towards the north-east salutes the celebrant and presents gifts to his *purohit*. He then crosses his arms and places his right hand on the right foot and his left hand on the left foot of the *purohit* and bows his head down until it touches his hands. The *purohit* then gives the *asisham* and for a Brahman reads the *gáyatri* three times, thus:—

Saluting the religious preceptor.

(1) *Om bhúrbhuvah svah tat sabiturbarenyam.*

(2) Repeat first line adding *bhargodevasya dhímahi.*

(3) Repeat both preceding and add *dhiyo yo nah prachodayát.*

The Kshatriya *gáyatri* is as follows:—

Om devasya savitur matimá sarvam visvadevyam dhiyá bhagam manámahe.

The Vaisya *gáyatri* is as follows:—

Om visvárúpánipratimunchate kavih prásá bídbhadram dwipadechatushpade binákamushyat savitá barenyo nuprayána mushaso virájati.

The boy again brings presents and falls at the feet of his *purohit* and prays that with his teacher's aid he may become a learned man. The *purohit* then instructs his pupil in the *Sandhya* already described. Next the *samidha* or small faggot of sticks from five trees previously mentioned is taken by the boy and with one of the pieces he touches his eyes and then dips one end of it in clarified butter and again the other and then places it on the fire on the altar. Similarly the ears, nose, hands, arms, forehead, lips, and breasts are touched in order and the sticks are burned. The celebrant then applies the *tryáyusham* or frontal and throat-marks with the ashes of the *homa* and clarified butter. The boy then goes through the *dandawat* or salutation as already described and again receives the *asisham*. He then addresses Agni, stating his name, caste, parentage, &c., and asks the deity to take him under his protection and again prostrates himself before his *purohit*, who usually delivers a homily on general conduct. The boy then begs from his friends and presents the results to his *purohit* saying:—"O Mahárája accept these alms which I have received."

Vedárambha.

Then commences the rite connected with the first study of the Vedas, the *Vedárambha*. Gautama has said that the Veda of the division to which the student belongs should first be read by him. The celebrant prepares the altar called the *Vedárambh-bedi*, for which the usual Ganesha-*púja* is performed and a fire is lighted thereon. The flame is then fed with the numerous offerings made in the names of the deities invoked to be present and assist, for whom the whole invitation, &c., is repeated, followed with the usual gifts and dedication. Then comes the worship of the Vedas themselves with invitation, &c., followed by the worship of Ganesha, Sarasvati, Lakshmi and Kátyáyani, accompanied with the usual installation address (*pratishthá*), invitation, &c. Then the boy looking towards the north-east performs the *pránáyám* and recites the *gáyatri* and mantras in honour of the four Vedas, commencing with that belonging to his own division. He next recites the *mahá-vyáhriti* with the *gáyatri* three times, *i. e.*, the *gáyatri* with the *namaskár*:—"*Om bhú, Om bhuvah, Om svah.*" He is then told to go to Benares and study there and for form's sake actually advances a short distance on the road and then returns, when the ceremony is closed with the usual distribution of gifts.

Samávarttana.

Next comes the *samávarttana*, which commences with the gift of a cow to the celebrant. The boy takes hold of the cow's tail with one hand and holding water in the other repeats a short formula and gives the cow to the celebrant. There is in this rite also an altar or *bedi*, the consecration of which takes place exactly as in the previous rite. The father, son and celebrant approach the altar and the son coming forward and laying hold of his right ear with his left hand and with his left ear with his right hand says he has ceased to do evil and wishes to learn to do well (*vyastápáni*). The celebrant answers "may you have long life." The celebrant then asperges the boy and his relatives from the water of the *uda-kumbh* or small vessel for holy-water usually placed near the *kalasa*, and subsequently takes whatever water remains and pours it through a metal sieve called *sahasradhára* on the head of the boy. These operations are each accompanied by a mantra, as also the taking off of the belt (*mekhala*) and the applying of the *tilak* to the twelve parts of the body:—(1) the head in which Kesho resides; (2) the

belly with Náráyan; (3) the heart with Mádho; (4) the right side with Vishnu; (5) the left side with Váman; (6) the hollow below the throat with Gobind; (7) the right arm with Madhusúdan; (8) the left arm with Sridhara; (9) the root of the ears with Trivikrama; (10) the back with Padmanábha; (11) the naval with Dámodar, and (12) top of the head with Vásudeva.

The boy then clothes himself, and the celebrant repeating appropriate mantras directs the boy to remain pure for three whole days, *i.e.*, not touching a Sudra or a dead body, &c. On the fourth day they again assemble, and the *homa* known as *púrnáhuti* is made, and again the entire ceremony of consecrating the *graha-bedi* is gone through as well as the worship of the nine planets and *jívamátris*, and the boy's sister or mother performs the *mahánírájana* before him, and all winds up with the usual gifts and a feast.

Viváha-karm.

The ceremonies connected with marriage come next and occupy no inconsiderable place in the services. They include those arranged in the following five divisions:—

(1) Agni-*púja*; clothing, perfuming and anointing the body; the *purohit* of the boy shall then ask the other the name and caste of the girl and communicate the same information regarding the boy.

(2) Presentation of a cow and coin in honor of the girl: procession from the house to the *Agni-bedi*.

(3) Invitation to the father of the bride and formal conclusion of the arrangements; then circumambulation of the fire-altar and performing the *Kusa-kandika*.

(4) The bride sits to the right, and the bridegroom sits to the left close together, while a *homa* is made.

(5) Next follows the *sanoravaprásanam*, *púrnapátra*, gifts to Brahmans, and the verses suited to the ceremony.

Vágdána.

Commencing with the first group we have the *Vágdána-bidhi* or rules for the preliminaries to a marriage. Some days before the wedding takes place the father of the girl performs the Ganesha-*púja* and the dedication declaring the object to be the correct and successful issue of the *Vágdána*, with detail of his own caste, name, race, and that of the boy to whom he has given his girl. The girl then performs

the Indráni-*púja* before a likeness of that deity drawn on gold or other metal. Next day the *sarvvárambha* or the beginning to collect the materials necessary for the wedding commences. The father of the bride takes a mixture of turmeric and *láhi* with water and anoints the body of the girl and performs the Ganesha-*púja*. The same is done by the father of the boy to the boy, and in addition he takes three small bags (*potali*) of cloth containing coin, betel, turmeric, *roli*, and rice,[1] one of which is buried within the hearth where the food is cooked; a second is suspended from a handle of the *karáhi* or iron-pan in which the food is cooked, and the third is attached to the handle of the spoon. The object of these proceedings is to keep off ghosts and demons from the feast. Thin cakes are prepared of wheaten flour (*sunwála*) and thicker cakes (*púri*) of the same, which, with sesamum and balls of a mixture of rice-flour, ghi, and molasses (*laddu* and *chhol*) are made by the women.

Next comes the *púrvánga* which takes place on the day before or on the morning of the wedding. The parents of both children, each in their own house, commence with the Ganesha-*púja*, followed by the *Mátri-púja*, *Nandi srádddh*, *Punyáhaváchana*, *Kalasa-sthápana* and *Navagraha-púja* as already described. The parents of the girl seldom perform more than the first two, and remain fasting until the *Kanyadán* has taken place. The father of the girl then through his daughter adores Gauri, Maheswari, and Indráni, and ties a *potali* on her left hand. The father of the boy binds a similar bag on the right wrist of the boy, and also on the left hand of the boy's mother. Four days afterwards the bags are removed. On the morning of the wedding day the family astrologer sends a water-clock to mark the exact moment with other presents to the father of the girl, and declares his intention of being present with the marriage procession at a certain hour. The boy is then dressed in his best, perfumed, anointed, and painted and placed in a palanquin, and, accompanied by the friends of the family and musicians, he sets out for the bride's house. He is met on the road by a deputation from the bride's father, conveying some presents for the bridegroom, and near the village by a relative of the bride, who interchanges further presents. The procession then halts for rest whilst

First visit.

[1] These are the contents of the *potali* commonly used, though a much more elaborate inventory is given in the ritual.

dancers and musicians exercise their craft. All then proceed to the house of the bride, where a clean-swept place opposite the principal entrance has been decorated by the women of the family with rice-flour and red sanders. On this place the celebrant and parties to the ceremony with their fathers and principal relations take their place whilst the remainder of the procession stand at a respectful distance. Next comes the *dhúlyargha* which commences with the consecration of the *argha*. Then the father of the bride recites the *barańá sankalpam*, dedicating the rite to the giving of his daughter to the bridegroom, after which he offers the water of the *argha* to the celebrant who accompanies the bridegroom, as well as water for washing his feet, the *tilak*, with flowers and rice, and the materials necessary for the ensuing ceremonies. Similar offerings are made to the bridegroom; and his father is honoured with flowers and the *asisham*, and all sit down to a feast.

The marriage-hall.

The near relatives of the parties then assemble in the marriage-hall. The bride is placed looking towards the west and the bridegroom towards the east with a curtain between them, whilst the fathers of each perform the Ganesha-*púja*. The bridegroom's father sends a tray of sweetmeats (*laddu*) to the girl's father, on which the latter places flowers and returns the tray to the boy's father. The bride's father then washes the bridegroom's feet and fixes the *tilak* on his forehead. Again the girl's father sends a tray of sweetmeats which is accepted and returned adorned with flowers. The bridegroom then performs the *áchumanam* and receives from his father-in-law a tray of sweetmeats (*madhuparka*) made from honey, &c. He should then taste a portion of them, and say that they are good and express his thanks for the present. He then washes his hands and rinsing his mouth performs the *pránáyám* and sprinkling of his body with the right hand merely and the usual mantra. The bride's father takes a bundle of *kusha* grass in the form of a sword and calls out "bring the calf:" the bridegroom says, "it is present."[1] Then water is sprinkled over the figure of the calf and several mantras are read, and as in the Kali-Yuga the slaughter of cows is prohibited, the figure is put aside and gifts are substituted.

[1] As a rule in Kumaon, the figure of a calf made in dough or stamped on metal is produced.

Verification of family.

In the meantime, a Brahman of the bridegroom's party prepares the altar, consecrates it, and lights the fire. The bride's father then gives four pieces of cloth to the bridegroom and he returns two for his bride. The bride's father then raises the curtain and allows the parties to see each other. Then the celebrant on the girl's side, after reading the *asírbáda* verse[1], asks the celebrant on the boy's side the *gotra, pravara, sákha, beda,* ancestors for three generations, and name of the boy. The celebrant on the boy's side recites a similar verse and replies to the questions asked, winding up with a request for like information as to the girl's family, which is given. The questions and answers are repeated three times, the verses alone being changed. This section of the rite winds up with the usual gifts, and dedicatory prayers and a *homa* of four sweetmeets, two from the bride's house offered by the bridegroom and two from the bridegroom's house offered by the bride.

The giving away.

At the exact time fixed for giving away the girl, the bride's father turns his face to the north, whilst the bride looks towards the west. The father then extends his hand and the girl places her hand (palm upwards) in her father's hand with fingers closed and thumb extended, and holding in the palm *kusha*-grass, sesamum, barley, and gold. The boy takes hold of the girl's thumb, whilst the mother of the girl pours water on the three hands during the recital of the dedication by the celebrant. This portion of the rite concludes with the formal bestowal of the girl generally called the *kanyádán*. When this is concluded the girl leaves her father's side of the hall and joins her husband, when the *dánaváky*a[2] is read, and the father of the bride addresses her and prays that if any error has been committed in bringing her up he may be forgiven. Next an address with offerings is made by the bridegroom to his father-in-law, thanking him for the gift of his well-cared-for daughter. In return the father declares the girl's dowry, and the clothes of the two are knotted together. Then come the usual gifts, aspersion, and offering of flowers. The bride and bridegroom then proceed to a second altar[3].

[1] In praise of Har and Hari. [2] Containing four verses from the Puránas. [3] This altar is about a cubit square and is surrounded by a hedge of branches of the sacred trees connected together with twine, outside which the circumambulation takes place either three, five, or seven times.

which is usually erected outside the marriage hall and whilst mantras are recited by the celebrant circumambulate the outer circle. This being done the *ágháráv-homa* follows which comprises twelve offerings conjointly made by bride and bridegroom, the former of whom holds her husband's arm whilst he places each offering on the altar and the celebrant recites the prescribed prayers. Next come the usual gifts and return in flowers and rice. Then follows the *Ráshtrabhrit-homa*, which also consists of twelve offerings, conjointly made, winding up with presents as before. Also the *Jayá-homa* with its thirteen offerings, the *Abhyátána-homa* with its eighteen offerings, the *Panchaka-homa* with its five offerings and the *Lájá-homa* with its offerings of flowers and fruit. Then the altar is again circumambulated and parched rice sprinkled from a sieve on the pair as they move slowly around. The bridegroom then lifts the bride and places her a short distance apart, when her brother approaches and gives her some parched rice with which she makes a *homa*. The bridegroom then asperges his bride with water from the *kalasa* whilst repeating the mantra:—"*Om ápah Siva sivattama*," &c., and also touches her chest and head with appropriate mantras. She then goes to the left of her husband and lays hold of his garments, whilst another mantra is read and the *Brahma-homa* is made by the bridegroom. The bride then washes her husband's feet, who in return makes her a present, and each applies the *tilak* to the other and eat curds and molasses together. After washing of hands the *Púrnapátra* takes place, in which forgiveness is craved for all defects in the ceremony or in the amount of gifts, &c., and the *mantra-pát* or leaf is placed on the bridegroom's head by the celebrant with the prayer that he may be well and have long life, and for this the celebrant is again rewarded. Then follows aspersion, the giving and receiving of the *tilak*, &c., and the bridegroom is told to look well at his bride. A homily is now given regarding their conduct, the one towards the other, that they should above every thing keep themselves pure for three nights or until the *chaturthí-karm* had taken place.

The circumambulation.

The party then proceed indoors and the Ganesha-*púja*, *Jívamátri* and *basodhara* rites are performed; the *mahánírájana* also takes place by the bride's mother, who presents sweetmeats and opening

the knot in their garments gives a portion of the sweetmeats to both bride and bridegroom, who then retire. Next morning the young married couple arise early and after domestic worship again tie their garments together and perform the *Dwára-mátri-púja* at the bride's father's home. The door-leaf is cleaned with rice flour and on it figures of the Mátris are drawn and reverenced conjointly, the bride assisting by holding her husband's arm. Again she alone prepares the threshhold and performs the *dehliya-púja*, by sprinkling rice and flowers. After breakfast both proceed to the bridegroom's house, where in the presence of a child who bears on his head a small lota of water with a green branch on it, indicative of prosperity, he formally commits his wife and her dowry to the safe keeping of his mother.

Dwára-mátri-púja.

The *Dwára-mátri-púja* again takes place and after entering the house the Ganesha-*púja* is performed with the dedication that the moment may be propitious and the usual gifts, &c., winding up with the *mahánírájana* by the sister of the bridegroom and the aspersion of the assembly by the celebrant. After this gifts are distributed and all the attendants are permitted to disperse. On the fourth day the *chaturthí-karm* takes place, which consists of the usual preparatory ceremonies followed by the removal of the *potali* or small bags from the wrists of the bride and bridegroom preceded by a *homa* and followed by the *púrnapátra* which concludes the ceremony.

Chaturthí-karm.

The next ceremony is the *dwirágamana* or 'second-coming' commonly known in these Provinces as the *gauná*. The instructions direct that on a propitious day the boy's parents shall cook certain cakes called *phenika* and placing them in a basket, the boy proceeds with them to his father-in-law's house, where he salutes all the family and presents the food. Early in the morning he performs the Ganesha-*púja* and at a favourable time places his wife near him. The *tilak* is then interchanged between him and the relatives of his wife and formal salutations take place. He then takes his wife and whatever portion of the dowry that is now given to his own house, and on arriving at the threshhold the garments of both are again knotted together. Both are then seated together and the husband rinses his mouth, consecrates the *argha* and performs the

Dwirágamana.

pránáyám and dedication to the *dwirágamana* and the *dwára-mátri-púja*. Ganesha and the Matris are then worshipped and the fixing of the favourable time is again gone through that the whole rite may be undertaken at the anspicious moment and be free from defects. Gifts are then made to the family *purohit* and astrologer as if to the deity and the couple go within while the *Svasti-váchana* is read. On entering the inner apartments the young couple worship the *Jíva-mátris* whose figures are drawn on the walls. The *kalasa* is then consecrated and the couple circumambulate the vessel and the usual offerings and dedication are made; winding up with the aspersion, after which the knots on the garments are untied and the couple feast and retire to rest.

Arka-viváha.

Should any one desire to marry a third time, whether his other wives are alive or not, he must go through the ceremony known as *arka-viváha* or marriage to the *arka* plant (*Calatropis gigantea*). The aspirant for a third marriage either builds a small altar near a plant of the *arka* or brings a branch home and places it in the ground near an altar. He then goes through all the preparatory ceremonies and also the Súryya-*puja* with its invitation, &c., and *prárthana* or adoration with hands clasped and appropriate mantras. He then circumambulates the altar and asks the caste, &c., as in the regular ceremony; a purohit answers on the part of the *arka* that it is of the Kasyapa gotri, the great-grand-daughter of Aditya, the grand-daughter of Savá and the daughter of Arka; then follows the caste, name, &c., of the real bride. A thread is then wound ten times around the *arka* accompanied each time by a mantra and again around the neck of the *kalasa*. To the north of the *arka*, a fire-altar is raised and the *ágháráv-homa* is made to Agni with gifts and dedication. Next comes the *pradhán-homa* with the mantras, "*Om sangobhí*" and "*Om yasmaitrva*"; the *Vyáhriti-homa* with its own mantra and the *Bhúrádí naváhuti-homa* with its nine mantras closing with the *púrnápátra* and dedication. After this a second circumambulation follows and a prayer and hymn. Four days the *arka* remains where it has been planted and on the fifth day the person is entitled to commence the marriage ceremonies with his third wife. If, however, she be already a widow he can take her to his home without any further ceremony.

Kumbh-viváha.

The *Kumbh-viváha* or marriage to an earthen vessel takes place when from some conjunction of the planets the omens for a happy union are wanting, or when from some mental or bodily defect no one is willing to take the boy or girl.[1] The ceremony is similar to the preceding, but the dedication enumerates the defects in the position of the planets in the worshipper's horoscope and states that the ceremony is undertaken to avoid the malign influences of the conjunctions of the adverse planets or of the bodily or mental defects of the native as the case may be. The nine planets are honoured and also Vishnu and Varuna, whose forms stamped on a piece of metal are amongst the furniture of the ceremonial. The *anchala* or knot-tying is made by connecting the neck of the girl or boy with the neck of the vessel, when the aspersion is made from the water of the *kalasa* with a brush made of the five leaves.

Casual ceremonies.

Several ceremonies are prescribed for alleviating (*sánti*) the evil effects of accidents, bad omens, portents, unlucky acts, &c., which may be briefly noticed here. Thus, if in ploughing, the share injures or kills a snake, a short ritual is prescribed to appease the lord of the snakes. Ganesha, the Mátris and Kshetrpál are first worshipped on the spot: then the figure of Mrityunjaya is drawn on cloth and with it that of the snake-god, and both are worshipped with the invitation, &c., and the *sarp*-mantra is recited and a *homa* made. One-sixteenth of the value of the cattle should be paid as a deodand to Brahmans. Another ceremony known as the *vrishabhapatana* takes place when a bullock dies while ploughing or is injured. It is believed that if the *Megha-sankránt* comes within the conjunction of the planets noted in the horoscope, the native will die within six months, and similarly if the *Túla-sankránt* come within the horoscope the native dies before the next *Megha-sankránt:* to avert these evils a special ritual is prescribed in which Gobind is the principal deity invoked. A more elaborate service takes place on the occasion of an eclipse

On killing a snake.

Death of a plough-bullock.

Unlucky conjunctions.

[1] The *Vishnu pratimá-viváh* is similar to the *Kumbh-viváh*. The girl is first married to a picture of Vishnu when the conjunction of the planets would show her to become a widow or a bad character in order to avert their influence.

when numerous articles are placed in the *kalasa* and the image of the snake-god stamped on metal is worshipped and the usual gifts are made. The ceremony of being born again from the cow's mouth (*gomukhaprasava*) takes place when the horoscope foretells some crime on the part of the native or some deadly calamity to him. The child is clothed in scarlet and tied on a new sieve which is passed between the hind-legs of a cow forward through the fore-legs to the mouth and again in the reverse direction signifying the new birth. The usual worship, aspersion, &c., takes place and the father smells his son as the cow smells her calf. This is followed by various burnt offerings and the usual gifts, &c. Ceremonies are also prescribed when the teeth are cut irregularly, when the father and son are born in the same lunar mansion, when three children are born at the same time or in the same lunar mansion, when snakes are seen *in coitu*, when a dog is seen during a ceremony, when a crow evacuates on one's clothes, on seeing a white crow, when gifts of land, money or grain are made and when building a house, &c.

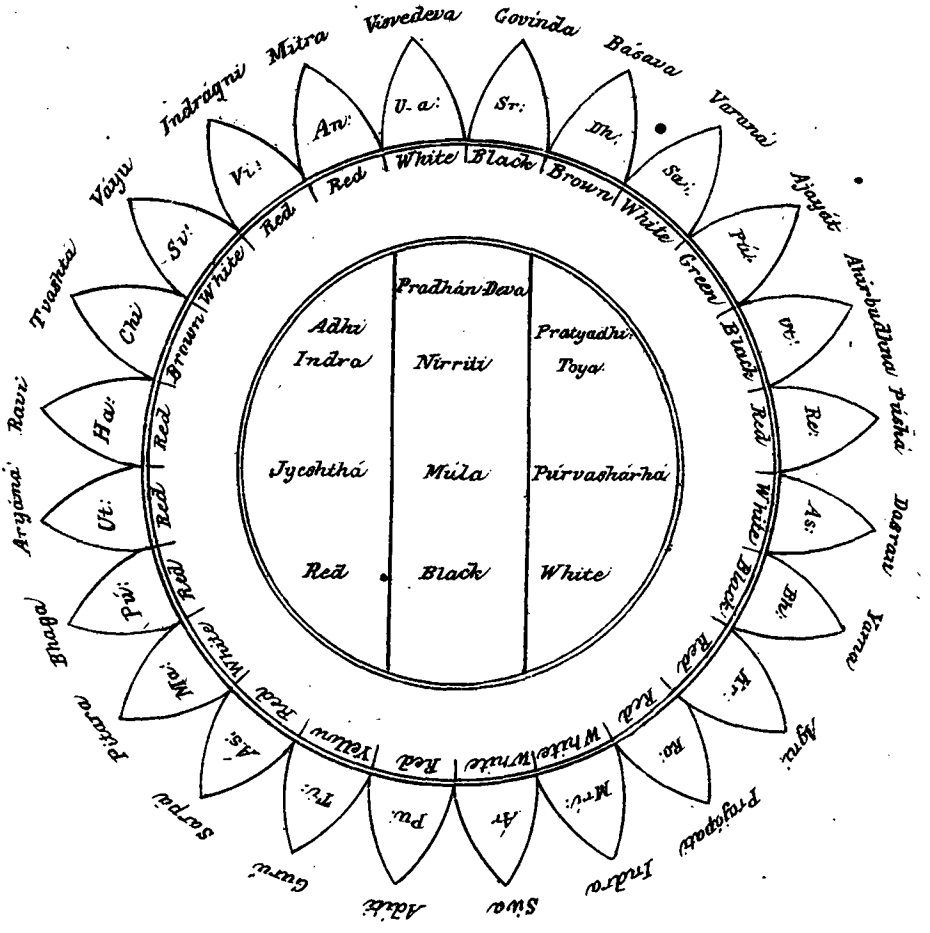
Born again from a cow's mouth.

Dentition, &c.

The misfortunes that are supposed to follow any one born in the *múla-nakshátra*, which is presided over by Nirriti, the goddess of evil, are such that the parents are advised to abandon such a child, whether boy or girl, or if not to go through the ritual prescribed for the occasion with great care and circumspection. The *múla-sánti* commences with the Ganesha-*púja* followed by the setting up of the *argha* and the dedication. Then sesamum, *kusha*, barley and water are taken and the *pradhán-sankalpam* is recited and also the *Mátri-púja*, *Punyáha-váchana* and *Nándi-sráddh* are gone through. The celebrants are then appointed and duly reverenced and the person who causes the ceremony to be performed stands before them with the palms of his hands joined together in a submissive attitude and asks them to perform the rite according to rule. The celebrants consent and proceed to the *grihasála*, or as usual in Kumaon to the place where the cows are tied up. A place is selected and purified either with holy-water (*i. e.*, water which has been consecrated by using the names of the sacred places of pilgrimage) or the mixture called *panch-gavya*. To the south-west a hollow is

Múla nakshatra.

made and a fire is lighted therein, and this is followed by the ritual contained in the formal appointment of the Brahman to the aspersion. An altar is then made and on the top a lotus of twenty-four petals is drawn and coloured and named as in the following diagram[1]:—



[1] The name on the petals is that of the initial letters of the *nakshatra* or lunar-mansion, above which is the name of the regent of the mansion and below the colour which should be given to it. The names in order commencing with the mansion over which the Visvedevás preside are as follows :—

1. Uttará-Ashárhá.	10. Krittiká.	19. Uttara-phalguni.	
2. Sravana.	11. Rohiní.	20. Hasta.	
3. Dhanishthá.	12. Mriga-siras.	21. Chitrá.	
4. Sata-bhishaj.	13. Árdrá.	22. Svátí.	
5. Púrva-bhádrapadá.	14. Punarvasú.	23. Visákhá.	
6. Uttara-bhádrapadá.	15. Tishyas.	24. Anurádhá.	
7. Revatí.	16. Áśleshá.	25. Jyeshthá.	
8. Asvini.	17. Magha.	26. Múla.	In the middle.
9. Bharaní.	18. Púrva-phalgreni.	27. Púrvashárhá.	

A handsome metal vessel is then placed in the midst of the figure and four other vessels are placed one at each corner of the principal altar. A figure of Nirriti stamped on metal is placed in the centre of the altar on its vessel and small pieces of gold, silver and copper on the other vessels after having been washed with the five nectars applied with the usual mantras. Next comes the address to Nirriti prefaced by the *vyáhriti*-mantra:—'Come hither and remain here o Nirriti mistress of the *múla-nakshatra*, grant our requests and accept our reverence.' Her companions and the twenty-four deities residing in the petals of the lotus are similarly invited with the same formula.

Three of the vessels are dedicated to Brahma, Varuna and the nine planets who are invited to attend. Then the meditation on Nirriti and the deities to whom the altar is dedicated follows:—'Nirriti, black in colour, of beautiful face, having a man as thy vehicle, protectress, having a sword in thy hand, clad in shining robes adorned with jewels.' A similar short meditation on Indra and Toya is given and for the remaining deities, the recital of their names is held sufficient. Nirriti then receives the formal invitation, &c., with the mantra:—'*Om moshúṇa*,' &c., whilst the others are merely named. Then those deities invited to occupy the three vessels above named receive the invitation, &c., and commencing with Nirriti all are in order worshipped with flowers, sandal and water. The vessel placed to the north-east of the altar is dedicated to Rudra and on it are laid the five varieties of *svastika* and below it, a *drona* of grain. On the covered mouth of the vessel the image of Rudra stamped in metal is placed after being washed in the five nectars as before followed by the dedication, meditation, hymn of praise and invitation, &c. Then the *anganyás* to Rudra is repeated six times and the Rudrádhyáya, eleven times, &c., &c. Next incense formed from the burnt horns of goats is offered to Nirriti and also wine, barley-cakes, flesh and the yellow pigment from the head of a cow (*gorochaná*); flesh, fish, and wine, however, should not be used by Brahmans, who should substitute milk with salt for wine and curds with salt for flesh. Lamps are now waved to and fro before all the deities and a fire is lighted on the altar and a *homa* made. Next the *ághárávhoma*, the *krisara-homa*, the fifteen-verse *homa*, fuel,

rice, &c., with the *Sri-sákta* mantra, the *páyasa-homa*, the *púrnáhuti-homa*, and the *Agni-homa*, are made, after which the fire on the altar is extinguished and Agni is dismissed. The vessel on the principal altar sacred to Nirriti is now filled with various materials and whilst these are stirred round several mantras are recited. The parents of the child and the child then bathe outside in a place prepared for the purpose and ornamented with *svastikas* and all are sprinkled with holy-water. Some hundred verses are then repeated with the prayer that the evil influences due to birth in the *Múla-nakshatra* may be effectually prevented. A similar ceremony is performed on account of any person born in the *Aslesha-nakshatra*.

Funeral ceremonies.

The ceremonies to be observed at funerals are found in the *Preta-manjari*, the authority on this subject which obtains in Kumaon. This work opens with the direction that when a person is *in extremis* his purohit should cause him to repeat the hymn to Básudeva and the *smarana* in which the names of Ráma and Siva occur, and after these make the *dasdán* or bestowal of ten things in accordance with the *sútra*[1]:—'The learned have said that cattle, land, sesamum, gold, clarified butter, apparel, grain, molasses, silver and salt are included in the ten gifts.' In bestowing the *dasdán*, the sick man or in his stead the *purohit* first rinses his mouth and consecrates the *argha* and then repeats the *prándyám* as already described. The meditation or *dhyána* appropriate is that known as the *Sríparameswaransmritwa* or meditation on the Supreme being as distinguished from and above his particular manifestations as Siva and Vishnu. This is followed by the *sankalpam* or dedication of the gifts with the same mantra as used in the Ganesha-*púja* (*Om Bishnu*, &c.), ending with the prayers that there may be a removal of all sins committed wittingly or unwittingly by the dying man during his life-time and that he may obtain the fruit of the good act. For this purpose on the part of the moribund each of the gifts and the Brahmans concerned are reverenced and the gifts are then presented. First the *kapiládán* or a gift of a cow of a yellowish-brown colour with the five mantras[2] beginning with:—*Idam vishnurvichakrame tredhánidadhe padam*

Kapilá-dán.

[1] *Go bhú tilahiranyájyam básodhánya gurúnicha raupyam lavanamityáhur dasadánánipanditá.* [2] The manuscript consulted is evidently very carelessly transcribed, but I have retained the readings as I found them.

samúrhamasya pá gvan sure—and in practice this alone is recited. Then the *argha* is presented to the Brahman with a mantra[1] praying him as best of men to be present at the sacrifice and accept the *argha*. Then sandal-wood is given with a mantra[2] and rice with another mantra.[3] Flowers are then presented with the mantra:—'Glory to thee, O Brahman.' Next the cow should receive veneration with the appropriate mantra:—'Glory to thee O Kapila,' and each of its members, the fore-feet, mouth, horns, shoulder, back, hind-feet, and tail with a salutation and the gift of sandal, rice and flowers. A covering is then presented with food, incense, light, and the installation hymn:—*Yá Lakshmí sarvalokánán*, &c. Then the moribund takes sesamum, *kusha*-grass, barley, and gold in a pot of clarified butter and with them the cow's tail in his hand over which water is poured and all are dedicated to the removal of the guilt of his sins and for this purpose are given to so and so Brahman in the name of Rudra. The cow is first addressed, however, with the mantra:—*Kapilesarvva-barnánám*, &c. The cow and Brahman then circumambulate the moribund, who with clasped hands repeats a verse[4] in praise of the cow.

Bhúmi-dán, &c.

Next comes the *Bhúmi-dán* or gift of land. The installation hymn (*prárthana*) beginning:—*Sarvabhútásrayábhúmi, &c.*, is first addressed to the earth. Then a ball of clay is made from the soil of the land which is intended to be given away and is worshipped and dedicated as in the previous gift and then after consecration, is given away for Básudeva's sake to the Brahman. The *Tilá-dán* or gift of sesamum follows with the mantra:— *Tiláh svarna samáyuktá*, &c., and the usual consecration and dedication in the name of Vishnu and the hymn of praise:—*Tiláh pápahará nityam, &c.*

Next comes the *Hiranya-dán* or gift of gold with a mantra[5]:—and the usual dedication, &c., in the name of Agni. The *Ajya-dán* or gift of clarified butter is next made with the mantra:—'Sprung from Kámadhenu, &c.,' and the dedication in the name of

[1] *Bhúmidevágrajaumási twam vipra purushottama pratyaksho yajna purushah arghayam pratigrihyatám.* [2] *Gandhadwárán durádharshán nityapushtán karishiním Isvarín sarvabhútánán támyaho (?) pahvayesriyam.* [3] *Namobrahmanya deváya go bráhmanahitáyacha jagathitáya Krishnáya govindáya namonamah.* [4] *Om gávah surabhayo nityam gávo guggula gandhiká, &c.* [5] *Hiranyagarbha garbhatwam hemabíjam vibhá vaso ananta punya phaladámatah sántim prayachchhame.*

Mrityunjaya. The procedure is the same all through, the mantras used alone being different. For the *Bastra-dán* or gift of apparel we have the mantra:—'*Píta bastram*, &c.,' and the dedication in the name of Vrihaspati. The *Dhányáni-dán* or gift of grain of seven kinds has the mantra:—'*Dhanyam karoti dátáram*, &c.,' and is presented in the name of *Prajápati*. The *Gur-dán* or gift of molasses has the mantra:—'*Guramanmathachápotha*, &c.,' and is given in the name of Rudra. The *Raupya-dán* or gift of silver has the mantra:—'*Rudranetra samudbhúta*, &c.,' and is offered for the sake of Soma, the moon, with the prayer that any laxity in morals may be forgiven. The *Lavanu-dán* or gift of salt follows with the mantra:—'*Yasmá-dán rasáh sarve*, &c.,' and is presented on behalf of all the gods.

Last service for the dying.

The moribund next presents the fruit of all the ceremonial observances that he has undertaken during his life to plead on his behalf with Isvara. He also dedicates sesamum, *kusha*, barley and water and enumerates all the penance that he has performed during his life and commits it with an oblation to the mercy-seat in the name of Agni to plead on his behalf. He then prays that for the sake of the good Básudeva whatever errors he may have committed in ceremonial or other observances knowingly or in ignorance, in eating or drinking and in his conduct towards women or men may be forgiven, for which purpose he offers gold. A similar gift of a cow is sometimes made to clear off all debts due to friends and others, but the practice has fallen into disuse, as the heir, according to the usage of the British law-courts, must pay his father's debts if sufficient assets fall into his hands.

Vaitaraní-dán.

Another cow should be presented in Govind's name to prevent the retribution due on account of evil acts of the body, evil speech in words and evil thoughts in the heart, and again another cow in the hope of final liberation (*moksha-dán*) through the loving-kindness of Rudra and in his name. As a rule, however, but one cow is given, and this only in the *Vaitaraní-dán* which now takes place. For this rite a cow of a black colour is selected and worshipped as prescribed in the *kapilá-dán*, and the gift is dedicated to help the spirit of the moribund after death in its passage across the Vaitarani river,

and with this object it is formally delivered over to a Brahman. The installation verse for the cow is—'Glory to thee, o cow, be thou ready to assist at the very terrible door of Yama this person desirous to cross the Vaitarani,' and for the river is the verse :—"Approaching the awful entrance to the realms of Yama and the dreadful Vaitarani, I desire to give this black cow to thee, o Vaitarani, of my own free-will so that I may cross thy flood flowing with corruption and blood, I give this black cow." Selections from the *Bhagavad-gíta* are then read to the sick man and the thousand names of Vishnu are recited. His feet and hands are bathed in water taken from the Ganges or some other sacred stream whilst the frontal mark is renewed and garlands of the sacred *tulsi* are thrown around his neck. The ground is plastered with cow-dung and the dying man is laid on it with his head to the north-east and if still able to understand, verses in praise of Vishnu should be recited in a low, clear voice suited to the solemn occasion. The priestly instinct is even now alive and the family astrologer appears on the scene to claim another cow that the moribund may die easily and at an auspicious moment.

Preparing the body for the pyre.

When the breath has departed, the body of the deceased is washed with earth, water and the fruit of the *Emblica officinalis* and then anointed with clarified butter whilst the following mantra[1] is repeated :—"May the places of pilgrimage, Gya and the rest, the holy summits of mountains, the sacred tract of Kurukshetra, the holy rivers Ganges, Jumna, Sarasvati, Kosi, Chandrabhága which removeth the stains of all sins, the Nandábhadra the river of Benares, the Gandak and Sarju as well as the Bhairava and Váráha places of pilgrimage and the Pindar river, as many places of pilgrimage as there are in the world as well as the four oceans enter into this matter used for the ablution of this body for its purification." The body is then adorned with *gopichandan*, the sacrificial thread, yellow clothes and garlands. Gold or clarified

[1] *Gyádínicha tírthání yecha punyáh silochchayá kurukshetramcha gangácha yamunácha sarasvatí kausikí chandra-bhágácha sarvapápapranásiní nandábhadrácha káshícha gandakí sarayú tathá bhairavancha varáhancha tírtham pindaraham tathá prithivyám yáni tírthání chatwárah ságaras tathá savasyásya visudh dharthum asminstoye visantuvai.*

butter is then placed on the seven orifices of the face and the body is wrapped in a shroud and carried to the burning-ghát. The body is placed with its head to the east and the face upwards whilst the near male relatives are shaved. In the meantime *pindas* or small balls of barley-flour and water are offered according to the rule :—*Mritasthâne tathá dwâre visrâmeshu chitopari kukshaupindâh pradâtavyá pretapindá prakírtitáh*—'When the man dies, at the door (of his village), where the bearers rest, at the pyre when ready to be lighted, these (five) *pindas* should be offered by rule; if they are not offered, the spirit of the deceased becomes a Rákshasa.' Each *pinda* should have its proper dedication with definition of time, place, and person (*mritasthán, dwára, &c.*) First some water is thrown on the ground with a dedication, and then the pinda is taken in the hand and after the recital of the dedication, it, too, is thrown on the ground and again water is sprinkled on the same place with a third dedication. This is repeated at each of the five places. The wood of sandal, cedar, *bel*, or *dhák*, mixed with ghi, are laid on the body, which is placed on the pyre with the head to the south. The son or nearest male relative bathes and dedicates the rite to the release of the soul of the deceased from the company and region of sprites and its exaltation to the heaven of the good, after which the *kukshapinda* is offered.

Office for cremation.

The fire is next applied by the nearest male relative to the wood at the feet of the corpse, if the deceased be a female, and to the wood at the head, if a male, with the mantra :—" *Om* mayest thou arrive at the blissful abodes, thou with thy deeds whether done ill purposely or unwittingly have become an inhabitant of another world, thy body encompassed with its load of desire, weighted with its deeds of right and wrong has been completely resolved into its five elements." Then comes the *Tilamisra-ajyáhuti* or *homa* with sesamum mingled with clarified butter accompanied by the mantra :—*Om lomabhyah svâhá twache svâhá lohitáya svâhá om má gvan sebhyah svâhá om medobhyah svâhá om tvagbhyah svâhá om majjábhyah svâhá om retase svâhá om roditavyah svâhá.*—'Hail salutation to the hair, epidermis, blood, * * marrow, skin, the essential element of the body, the semen, and to him

who is bewailed.' Then follows the *sútra* directing the circumambulation of the pyre whilst sesamum[1] is sprinkled over the burning body with the mantra :—' *Om*, glory to the fire of the funeral pyre.' When the body has been almost entirely consumed, a small portion of the flesh, about the size of a pigeon's egg, should be taken and tied up in a piece of cloth, and flung into a deep pool. Then the person who conducted the ceremony puts out the fire and bathes, anointing himself with the *pancha-gavya* and places a seat of *kusha*-grass for the spirit of the deceased with a dedication followed by water, a *pinda* and again water, each accompanied by its proper dedication.

Bali-dán.

Next the *bali-dán*, consisting of rice, sandal, &c., is offered to the goblins and sprites of the burning-ghát with the prayer that they will accept it, eat it and be appeased. Whoever wishes to preserve a portion of the bones to cast them into the sacred stream of the Ganges at Hardwár (*phúl syavauna*) will collect them between his thumb and little finger and wash them in the *pancha gavya* and clarified butter and placing them in a cloth bury them for a year before he attempts to carry out his purpose. All ceremonies performed for an ancestor must be carried through with the sacrificial thread over the right shoulder, all worship of the gods with the thread as usual over the left shoulder. The pyre is then cleaned and smeared with cow-dung whilst the dedication is made and water and a *pinda* are given followed by water as before. Then the mantra is recited :—*Anádi nidhano deva sankha chakra gadhádar akshayah pundaríkaksha preta moksha pradobhava.*—An address to the deity praying for the liberation of the soul of the deceased. A Brahman repeats this mantra with his face towards the south; a Kshatriya looking towards the north; a Vaisya to the east and a Sudra to the west, whilst the knot of the hair on the top of the head is unloosed. The sacrificial thread is then replaced and the *áchamanams* made. The thread is again put on the right shoulder (*avásavya*) whilst water is offered in the hollow of both hands to the manes of the deceased. The person who performs the rites bathes again before returning home and fasts for the rest of the day.

[1] The rich throw sandal, *tulsi*, sesamum and clarified butter on the pyre whilst the relatives cry out with a loud voice so as to attract the notice of the dwellers in paradise.

Lamps are kept lighting for the benefit of the manes for ten days after cremation either in a temple or under a *pípal* tree or where the obsequial ceremonies are performed, according to the rule:—*Tiláhpradeyá páníyam dípodeyah siválaye jnátibhih sahabhoktabyam etat pretasya durlabham.*—"The relatives of the deceased should in his name provide sesamum, water and lights for the temple since these necessary duties are impossible for a spirit.'

Ceremonies after cremation.

The place where the obsequial ceremonies (*kiriya-karm*) subsequent to cremation take place is called *ghát*. It is chosen, as a rule, near running water, but must not lie to the west of the house where the person for whom the rite is performed died. On the day following the cremation, the person who performed the principal part at the funeral pyre proceeds to the *ghát* and selecting a place, clears it and plasters it with mud and cow-dung. A fire-place is then built towards the northern part and on one side, an altar of white clay smeared with cow-dung. The lamp is next lighted with the dedication to enlightening the manes now in darkness so as to alleviate its sufferings. Then with top-knot unloosed the celebrant bathes on behalf of the manes with the usual definition, of place, time, person and object which is the performance of the ceremonies of the first day.

Next the top-knot is tied up and the mouth is rinsed, after which he takes sesamum, water, *kusha*-grass and barley and with his face towards the south offers them in the palms of both hands on behalf of the manes with the usual dedication. The object declared is to allay the extremes of heat and thirst which the spirit must undergo and to perform the rites of the first day on its behalf. The ceremony known as the *Tilatoyánjali* must be performed either thrice or once each day for the next ten days. Then rice[1] is boiled in a copper vessel and in it sesamum, *nágkesar*, honey and milk are placed and afterwards made into balls about the size of a *bel* fruit; these are offered with a dedication in the name of the deceased and the object that the spirit should obtain liberation and reach the abodes of the blessed after crossing the hell called

Tilatoyánjali.

[1] Kshatriyas and all other than Brahmans make the *pindas* of barley-flour and also the illegitimate children of Brahmans.

Raurab and also that the head of the new body of the spirit may be formed correctly. Before actually offering the *pinda* the celebrant should stand in silence to the left of the fire-place, and place a *pavitra*[1] on the ground and on it a *karm-pátra* or sacrificial vessel and on the latter again a *pavitra*. The vessel should then be filled with water, sesamum and perfumes whilst the altar is covered with *kusha*-grass. The celebrant next takes a *pavitra* and water in his hand and repeats the dedication as to laying the *kusha* on the altar in the name of so and so deceased as a seat for his spirit. After this, water (*avanejana*) is poured on the altar with a similar dedication and then the *pinda* is offered whilst the celebrant drops on his left knee and repeats the dedication already given. As already noticed the object of the *pinda* presented on the first day is to enable the spirit to cross the hell called Raurab and have a head for its new body. This is followed by an offering of water, one of very cold water, and one of sandal, rice, *bhinga-rája*[2] (*Eclipta prostrata*), flowers, incense, lamps and balls of rice and honey, each with its own proper dedication in the name of the manes. The thirteenth dedication is concerned with the consecration of the *karm-pátra* already mentioned. On the first day one *pinda* is offered: on the second, two *pindas*, &c., so that in ten days, fifty-five *pindas* are offered each with the same ceremony as here given. Then comes the prayer that the *pindas* already given may reach the manes, and the *karm-pátra* is turned upside down. The mouth is then rinsed with the usual formula and all the materials are thrown into the water with the mantra[3]:—'Thou hast been burned in the fire of the pyre and hast become separate from thy brethren, bathe in this water and drink this milk thou that dwellest in the ether without stay or support, troubled by storms and malignant spirits, bathe and drink here and having done so be happy.'

To the south of the fire-place a small earthen vessel known as a *karuwa* is filled with water in which *kusha*, sesamum, barley and milk are placed and suspended from a tree, or if there be no tree, from a stake fixed in the ground with a tooth-brush of *nim*

[1] See before. [2] In Kumaon the *Cinnamomum Tamala* or *tejpát* is used.
[3] *Chitánala pradagdhose parityaktosi bándhavai idam niram idaam kshiram mantrasnáhim idam piva ákásastho nirálambo váyubhúta sramárditah atra snátwa idam pitwa snátwa pitwa sukhi bhavah.*

(*Melia indica*). Then bathing and putting on clean clothes, the celebrant returns home and when eating puts a portion of the food on a leaf-platter and leaves it with water either where four roads meet or on that side of the village which is nearest to the burning-ghát, both places being the favourite resorts of disembodied spirits. This portion called the *preta-grás* or spirits' mouthful is offered with the usual dedication to the name of the deceased.

Ceremonies of the first ten days.

The proceedings of each day are the same, the only difference being the object of the *pinda*. The following list of the hells crossed before reaching paradise and the different parts of the new body of the spirit affected by each day's ceremony will suffice :—

Day.	[1]*Hell met with.*	*Portion of the new body formed.*
First ...	Raurava ...	Head.
Second ...	Yonipunsaka ...	Eyes, ears and nose.
Third ...	Mahárauraya ...	Arms, chest, neck and members of the mouth.
Fourth ...	Támisra ...	Pubic region, penis, void and parts around.
Fifth ...	Andhatámisra ...	Thighs and legs.
Sixth ...	Sambhrama ...	Feet and toes.
Seventh ...	Amedhya krimi púrna ...	Bones, marrow and brain.
Eighth ...	Purísha bhakshana ...	Nails and hair.
Ninth ...	Svamánsa bhakshana ...	Testes and semen.
Tenth ...	Kumbhípáka ...	To avoid the wants of the senses.

Tenth day.

The new body having been formed the natural wants of a living body are presupposed and the ceremony of the tenth day is devoted to removing the sensation of hunger, thirst, &c., from the new body. On the same day the clothes of the celebrant are steeped in cow's urine with soapnuts and washed, the walls of the house are plastered, all metal vessels are thoroughly cleaned, the fire-place at the ghát is broken and an *anjali* of water offered to the ether for the sake of the manes and to assuage its thirst. The celebrant then moves up the stream above the *ghát* and with his near relatives shaves and bathes and all present an *anjali* of water as before. Bathing again all proceed homewards,[2] having been sprinkled with the

[1] Most of these names of hell occur in the law-books or the Puránas. The first, third, fourth and fifth in Manu, IV. 88 : the tenth in the Bhágavata-purána, and the remainder in the Skanda-purána. [2] It is the custom to offer one more *pinda* on the road homewards called the *pátheyasrádd*h, but this is usually made of uncooked flour and water.

pancha-gavya. The following rule lays down the period necessary for purification :—*Brahmano dasa-átrena dwádasáhena bhúmipáh vaisyah panchadasáhena súdro másená suddhyati*. The Brahman becomes pure in ten days, the Kshatriya in twelve days, the Vaisya in fifteen days and the Sudra in a month.

Ceremonies of the eleventh day.

After the usual domestic prayers, on the eleventh day, the figures of Lakshmi and Náráyan are worshipped and a covering spread for them on the chárpái of the deceased and a cow offered in his name as *kapilá-dán*. Next vessels of water (*Udaka-kumbh*) are filled and food prepared in the name of the deceased. A bullock is also branded on the flanks with the trident and discus and struck three times with the hand and then let go,[1] followed by the *ekádasáha sráddh*. The palm of the hand represents three *tírthas*: the *Brahma-tírtha* is the hollow at the wrist through which the rinsing of the mouth is effected, the *Deo-tírtha* is between the fingers sloping downwards and is used in offering water to the gods, and the *Pitri-tírtha* is the hollow between the thumb and first finger through which the water flows when offered to ancestors. For instance in the worship of Lakshmi-náráyan, the water is presented through the *Deo-tírtha*. First the covering is placed on the chárpái and on it the images with a dedication to the sure admission into paradise of the manes, and for this purpose the figures of the deities Lakshmi and Náráyan are worshipped. The installation hymn to the deities then follows and offerings of rice, water, sandal, flowers, incense, lamps and wearing apparel are made. To this succeeds the *dhyána* or meditation in honour of Vishnu, who has in his right hand the lotus, in his left the conch, &c.; then come appropriate gifts, according to the ability of the donor, which eventually become the property of a Brahman with the prayer that as Siva and Krishna live in happiness and comfort so may the deceased abide, and for this purpose all these good things have been provided. The *purohit* then lies down on the couch for a short time and so sanctifies the gifts that have been made whilst the verse is read :—*Yasya smrityácha námoktyá tapo yajnakriyádishu nyúnam sampúrnatám yátu sadyovande tam achyutam*.—'May whatever errors that I have

[1] As a rule, however, this is a mere form and the irons are not heated.

committed in my religious observances be forgiven and the result be made complete, o Achyuta.'

Gift of a cow.

Next comes the *kapilá-dán* as before with the dedication:—'O Kapila worshipped of all the four castes, best, containing all places of pilgrimages and deities alleviate my trouble.' The water vessels are next presented and there should be one for every day in the year and each should be accompanied by food and lights for the same period for the benefit of the spirit of the deceased[1] and then given to Brahmans with the verse:—'*Yasya*, &c.,' as in the preceding paragraph.

The scape-bullock.

The loosing of the scape-bullock (*vrishotsarga*) is seldom observed in Kumaon, though the ritual for it is given. First an altar is erected of earth and the fire is lighted thereon and Agni is installed and worshipped. The altar is then dedicated to the rite of the *pradhán-homa*. This homa is begun by throwing clarified butter into the fire with the mantra:—'*Om iharati sváhá idam agnaye om iharamadhvam sváhá idam agnaye om ihaghriti sváhá idam agnaye om ihamasva sváhá idam agnaye*; and again *Om prajápataye, indráya agnaye somáya sváhá*. Next curdled milk is thrown on the fire and the nine gods are saluted:—Agni, Rudra, Sarva, Pasupati, Ugra, Asana, Bhava, Mahádeo and Isána, all old names. Then comes the *Paushnacharu-homa* or oblation of rice, barley and pulse boiled in milk and clarified butter and presented with the mantra:—*Om púshá anvetunah púshá rakshasva sarvatah púshá vájánmanotunah sváhá*; and again *Om agnaye svishta krite sváhá om bhu sváhá om bhuvah sváhá om svah sváhá*. In these mantras the ancient deities Púshan and Agni are invoked. A bell is then suspended from the neck of the bullock and small bells are tied round its feet, and it is told that it is to be let go in order to save the spirit of the deceased from the torments of hell. The following mantra is then whispered in its ear:—*Vrishohi bhagwándharma chatushpádah prakírtitah vrinomi tam aham bhaktyá samán rakshatu sarvadá*. Then follows the verse:—'*Om ritancha*, &c.,' as in the *sandhya*. The bullock is addressed as the four-footed representative of the Supreme and asked to preserve for ever his votary. The *bailgáyatri*

[1] As a rule the poor can only afford one.

is then recited :—*Om tíkshna sringáya vidmahe vedapásáya dhímahi tanno vrishabhah prachodayát.* Sesamum, *kusha*, barley and water are taken in the hand and also the bullock's tail, whilst water is poured over all with the mantra :[1]—'To fathers, mothers and relations both by the mother's and father's side, to the *purohit*, wife's relations and those who have died without rites and who have not had the subsequent obsequial ceremonies performed, may salvation arise by means of the unloosing of this bullock.' The bullock will then be loosed with a dedication. The right quarter is sometimes branded with a trident and the left with a discus and the animal becomes the property of some of the low-caste people in the village.

Ekádasáha-sráddh.

The *ekádasáha-sráddh* commences with a bathing and dedication to the first *sráddh* in honour of the deceased. Hitherto only the ceremonies known as *kiriya-karm* have been performed whilst the spirit of the deceased remained a *pret*, but now in order that he may be numbered amongst the *pitris* or ancestors, the formal *sráddh* is undertaken in his honour and for his benefit. Dry, clean clothes are worn and the celebrant proceeds to the *ghát* and rinses his mouth with the usual formula. Then rice is cooked and five small bundles of *kusha* are washed and anointed with oil and set up to represent the Brahman on the part of the deceased with the *nimantran* or invitation :—*Gatosi divyaloketwam kritánta vihitáyacha manasá váyubhútena vipretwáham nimantrayet.*—'You have reached the blessed abodes having finished your course, be present though invisible at this rite.' Similar bundles are consecrated to represent the spirit of the deceased and water and the *argha* are offered with the prayer that they may be accepted. In silence the *karm-pátra* is placed on the ground and offerings of sandal, &c., made as before.[2] The dedication is then made for the purpose of performing the ceremony as if it were the *ekodishta-sráddh*.[3] For this purpose a seat is placed and the *argha*

[1] *Om svadhá pitribhyo mátribhyo bandhubhyascha triptaye mátri pakshásccha ye kechit yekechit pitripakshájah guru svasur bandhunán ye chánye kula sambhaváh ye preta bhávaná pannáh ye chánye sráddha barjitáh vrishotsargena te sarvve labhatán triptimuttamám.* [2] See previous page. [3] The *ekodishta* or *tithi-sráddh* is that performed on the anniversary of a father's death, whilst the general ceremony which takes place during the dark half of Kuár is called the *párvan* or *kanyángat-sráddh*. If the father dies during this part of Kuár the ceremony is called Khyá-sráddh. In the *párvan* the usual fifty-five pindas are offered ; in the *ekodishta* only one.

is consecrated and dedicated to the spirit of the deceased. Gifts are then presented to both the symbolised Brahman and *Preta* and both are reverenced. A brazen platter is then smeared with clarified butter and the rice placed on it and dedicated to the acceptance of the spirit. A circular altar a span in diameter is next made and smeared with cow-dung. Rice is also mixed with milk, sesamum, clarified butter, and honey and made into round balls about the size of a *bel* fruit and with *kusha*, sesamum and water are taken in the hand and dedicated to the first *srâddh*. The altar is covered with *kusha* and on it a single *pinda* is placed, then water, sandal, rice, flowers, incense, lamps, sweetmeats and woollen thread are each presented with a dedication as offerings to the spirit of the deceased. The bundles of *kusha* which represent the Brahman are then addressed and told that the preceding offerings have been made to the *Preta* and to grant that they may be accepted and for this purpose water is offered to him. Gifts are then made to the symbolised Brahman which are kept until the next day, as gifts made during the first eleven days cannot be accepted by a *purohit*. The water in the *karm-pátra* is then poured out at the feet of the Brahman and the *janeo* is changed to the left shoulder. This is followed by the usual rinsing of the mouth, after which the verse commencing :—'*Yasya*, &c.,' is recited.

On the twelfth day the ceremony known as *Sapindi* takes place.

Ceremony of the twelfth day.

The celebrant goes to the *ghát* as before and commences with bathing and dedication to the day's rite. He then makes three altars of the same dimensions as before: to the north, a square altar called the *Visvadeva-bedi*: to the south, a triangular altar called *Preta-bedi*, and to the east a circular altar called the *Pitámahádi-bedi*. Rice is then cooked and whilst it is being made ready, two Brahmans are formed from *kusha*-grass and placed at the northern altar as in the preceding ceremony with a formal invitation, during which barley is sprinkled over them whilst they are asked to take part in the *sapindi*. The following verse is then repeated :—*Akrodhanai sauchaparai satatam brahmacháribhih bhavitavyam havadbhischa mayácha srâddhakáriná sarváyásavinirmukte kámakrbhavvarjite*. Then the southern altar is approached and there the bundles of *kusha* representing the deceased are placed. These are addressed as above with the

verse—'*Gatosi*, &c.,' to which is added the line:—*Pújayishyámi bhogena eva vipram nimantrayet.* Then follows the changing of the sacrificial thread to the left shoulder and purification by rinsing the mouth before approaching the eastern altar. This is consecrated to the ancestors of the deceased for three generations in the male line, all of whom are named and represented by blades of *kusha*-grass. If a mother is the subject of the ceremony the names of the father's mother, grandfather's mother, &c., are given here. Next the wife's ancestors for three generations in the male line are invited and some one accepts on behalf of all and their feet are washed with the mantra:—'*Akrodhanai*, &c.' This also takes place at the other two altars and is followed by the celebrant taking the *pavitra* or knot of *kusha* and sticking it into the folds of his waist-cloth (*níbí-bandhan*). Each of the altars in order are again visited and a dedication is made to the *kusha* representatives at each with the *argha*, seat, invitation, sandal, rice, flowers, incense, lights, apparel, betel and a stone on which the rice is placed for making the pindas. The placing the stone and rice at the northern altar has the special mantra:—*Om agnaye kavyaváhanáya sváhá idam agnaye om somáya pitrimáte sváhá idam somáya.* At the southern altar the celebrant merely mentions the name of the deceased and that for him the food has been prepared, and at the eastern altar the stone and food are dedicated to the *pitris* who are named as before. The remaining rice is placed on another stone and mixed with honey, clarified butter and sesamum is divided into four *pindas*. A small portion of rice is then taken with a blade of *kusha* in the right hand and the hand is closed over the rice whilst this verse is recited:—*Asanskrita pranítánám tyáginám kulabháginám uchchhishta bhágadheyánám darbheshu bikarásanam.* It is then cast on the ground near the *pindas* and is called the *bikara-dán.*

Then kneeling on the left knee with *janeo* reversed a *pinda* is taken with *kusha*, sesamum and water in the name of the father of the deceased with the prayer that the earth here may be holy as Gya, the water like that of the Ganges, and the *pinda* be like *amrita*, and is placed on the altar. Similarly a *pinda* is taken and dedicated to the grandfather and great-grandfather of the deceased respectively. The last is dedicated to the spirit of the deceased that he may cease to be a disembodied spirit and become enrolled amongst

the ancestors. Next follows the usual gifts with dedication. The celebrant next divides the *pinda* of the deceased into three parts with a golden skewer and attaches one part to each of the *pindas* of the ancestors with the mantra :—*Ye samánáh samanasah pitaro yamarájye teshám lokah svadhá namo deveshu kalpatám ye samánáh samanaso jívá jíveshu mámakáh teshám srímayi kalpatám asmin loke sata gvan samáh.* The spirit thus becomes an ancestor and ousts his great-grandfather in the line of the *pitris*. Water is then presented and the *pavitra* is thrown away; rice is next sprinkled over the three *pindas* with the mantra :—*Om namovah pitaro rasáya namovah pitaro jíváya namovah pitaro sokháya namovah pitarah pitaro namovo grihán pitaro datta sadovah pitaro dweshmaitadvah pitaro vásah.* The same mantra is repeated whilst laying three threads on the *pindas* to represent their *janeos*. Next water, sesamum and *kusha* are presented with a dedication. Milk is then poured through the hand over the pindas whilst the preceding mantra is repeated. All now march round the altar whilst the celebrant recites the mantra :—*Ámávájasya prasavojagamyám deve dyává prithivi visvarúpe ámán gautám pitarámátará chárná somo amritatve jagamyám.* Then the celebrant gives himself the *tilak* with the mantra :—*Om pitribhyah svadhá ibhyah svadhá namah pitámahe bhyah svadhá ibhyah svadhá namah prapitámahe bhyah svadhá ibhyah svadhá namah akshanna pitaro mímadanto pitaro títrimanta pitarah pitarah sundadhvam.* Next the *ásisam* or benediction occurs, in which with hands clasped the celebrant prays for the increase in prosperity of his family, their defence in time of trouble, &c. The *pinda* of the father is then removed from the altar and in its place the figures of a conch, discus, &c., are drawn with sandal and on them a lighted lamp is placed and saluted whilst rice is sprinkled over it. The mantra used is :—*Om vasantáya namah om grishmaya namah om varshabhyo namah om sarade namah om hemántaya namah om sisiráya nameh*—forming an address to the seasons. The *pinda* is then restored to its place on the altar and the bundle of *kusha* which represents the Brahmans at the northern altar is opened out and one stalk is thrown towards the heavens whilst saying :—'Praise to the ancestors in paradise. Then follow the verses :—'*Saptuvyádhá dasárneshu, &c.,*' as in the

termination of the *Nandi-srádddh*, after which the materials for the ceremony are removed and gifts again made to Brahmans. Next the celebrant proceeds to a *pípal* tree, or if no such tree be near a branch is brought from a tree and a dedication is made in the name of Vishnu of the water of three hundred and sixty vessels of water which are poured over the tree and then the tree is tied round with thread three times and whilst moving round, the following mantra is repeated :—" Glory to thee o king of trees whose root is like Brahma, trunk like Vishnu and top like Siva." The ceremony concludes with the usual gifts and dedication.

Monthly ceremony.

On every monthly return of the date on which a father dies a single *pinda* is offered to his manes as before with a vessel of water to the *pípal* tree. This continues for eleven months and in the twelfth month the *Hárshika-srádddh* takes place which is in all respects the same as the *ekodishtá-srádddh* already described. The *náráyana-bali* is offered when a father dies in a strange land and his relatives cannot find his body to perform the usual rites. A figure of the deceased is made of the reed *kans* and placed on a funeral pyre and burned with the dedication that the deceased may not be without the benefit of funeral rites. Then the *kalasa* is consecrated and the forms of Brahma, Vishnu, Siva and Yama stamped on pieces of metal are placed on the covering of the *kalasa* and are worshipped with the *purusha-sukta* mantra. Then sixteen *homas* and ten *pindas* are offered with the usual dedication and the latter are thrown into the water. Sixteen offerings of water from both hands (*anjali*) conclude the ceremony. A separate ritual is prescribed for a woman dying whilst in her courses or dying in child-birth. The body is anointed with the *pancha-gavya* and sprinkled with water whilst the mantra :—'*Apohishta*, &c.,' is recited. The body is then taken and a small quantity of fire placed on the chest after which it is either buried or thrown into flowing water. For eight days nothing is done, but on the ninth day, forty-five *pindas* are given and the ceremonies of the remaining three days as already described are carried through if the people can afford it. There is also a separate ritual for persons who have joined a celibate fraternity as a Jogi, Goshain, &c. His staff and clothes are placed on the

chárpái as in the case of an ordinary person and the *arka-viváha* or marriage with the plant *madár* takes place, after which a *pinda* is offered in his name. *Fakírs*, lepers and women who die in child-birth are buried in Kumaon. It is believed that if any one dies during the Dhanishtá, Satabhishá, Púrvabhádá, Uttarábhádá or Rewati nakshatras or lunar-mansions, four others of his family will certainly die, and for the avoidance of this evil a *sánti* or preventive service is prescribed which must be held by the relatives and be accompanied by numerous gifts.

Bhojana-karm.

The observances connected with the preparation and cooking of food are classed amongst the domestic ceremonies and are known as *Balivaisvadeva*. After the food has been cooked and before it is eaten the person takes a small portion of it in his right hand and offers it as a *homa* on the fire whilst repeating the mantra[1]:—*Om* salutation to Agni, the vital air *prána; om* salutation to Váyu, the vital air *apána; om* salutation to Aditya, the vital air *vyána;* salutation to the same three deities, the same three vital airs; salutation to him who is fire produced from water, juicy nectar, Brahma, &c. The *gáyatri*-mantra[2] with the addition of the term *sváhá* after each section is then repeated as often as the person wishes. The *homa* or burnt-offering can only be made where the person can procure some clarified butter, where it cannot be obtained the *homa* must be omitted. Water is then taken in the hand and poured on the ground whilst the mantra[3] is repeated:—'If whoever eats remembers that Brahma, Vishnu and Siva are present in the food impurity cannot accrue from eating.' Where the water has fallen four small portions[4] of the food are thrown one after the other with the following

[1] *Om bhúr agnaye prándye sváhá om bhuvarváyave apánáye sváhá om svar adityáya vyánáye sváhá om bhúrbhuvahsvah agnivayuvádityebhyah prándpánavyanebyah sváhá om apojyoti raso'mritam brahma bhúr bhuvah svah om sarvan, vai púrna gvan sváhá.* Here the three kinds of vital airs are mentioned; *prána*, that which issues from the lungs; *apána*, from the anus and *vyána* that which circulates through the body. The usual number is, however, five and hereafter we have added, *samána*, that which is common to the whole body, and *udána*, that which rises though the throat to the head. *Sváhá* has the meaning probably of a good oblation or offering, and is here used with the mystical *vyáhriti* mantra. [2] See previous page. [3] The learned use the mantra:—*Om nábhyá asídantariksha gvan sírshnau dyau samavartatah padbhyám bhúmirdisah srotrát tathá lokán akalpayan.* The verse translated above is, however, far more common and runs:—*Annam brahmá raso vishnu bhuktá devo maheswarah evam dhyátivádi yo bhunkte annadosho nadiyate.* The ordinary cultivator seldom uses more than the three last words—'*annadosho nadiyate.*' [4] *Om bhúpataye namah om bhuvanapataye namah om bhútánápataye namah om sarvebhyo bhútebhyo balanumah.*

mantra:—'*Om*, glory to the lord of the earth; *om*, glory to the lord of created things; *om*, glory to the lord of sprites; *om*, glory to all beings.' Water is again taken in the hand whilst a mystical mantra[1] is recited. The water is then drank. Next about a mouthful of the food is taken in the hand and thrown away as the portion of dogs, low-caste persons, lepers, diseased, crows and ants.[2] The correct custom is to make one offering for each of these six classes whilst repeating the mantra, but in practice a very small portion is placed on the ground with the ejaculation:—'*Om*, glory to Vishnu.' The food is then eaten whilst with the first five mouthfuls (*pancha-grási*) the following mantra is recited mentally:—'*Om*, salutation to the five kinds of vital air, *viz.*, *práńa*, *apána*, *samána*, *vyána* and *udána*.' Then a little water is poured over the *bali* with the mantra:—'*Om* salutation to the *bali*,' and at the end of the meal the same is repeated with the verse[3]: 'May the giver of the meal have long-life and the eater thereof ever be happy.'

[1] *Om antaschárasi bhúteshu guhyáyám visvato mukhah twam yajnatwám vashatkára apojyotiraso'mritam svádhá.* The word *vashat* is an exclamation used in making oblations and *vashatkára* is the making it. [2] *Sunámchapantitá nancha svapachám páparoginán váyasánán krimináncha sanahair nirvapelbhuvih.* [3] *Annadátá chiranjivi annabhokta sadá sukhi.*

INDEX.

Page.

A.

Abars, tribe of 360
Abhidharma-pitaka of the Buddhists, on ritual ... 747, 750–1
Abhinava Gupta, Pásupata teacher... 773
Abhírás tribe 353, 357, 360, 373, 384
Abhisára 359, 378
Abjapáni, Avalokiteswara 808, 816
Acesines river ... 273, 312
Achala, a goddess 889
Achám, in Nepál ... 607, 608, 609
Acheris, fairies 833
Achyúta, deity 887
Ad-badri, temple 784, 786, 788, 814
Adhidevatás ... 886, 898
Adhokshaja, deity 887
Adi-Buddha, idea of ... 758, 761, 808
Aditi, Krishna, son of ... 716, 718
Adityás, deities 297, 299, 716, 726, 804, [886, 912
Agastya Muni, sage ... 348, 786, 806, 814
Aghan, the month 847
Agni, the deity, 281, 302, 705, 717, 720 (as Rudra), 773, 777, 780–1, 783, 788: consort of, 790, 802, 894, *et seq.*
Aguris of Kumaon 370
Ahírs in Nepál 364
Aihole grant 418
Aindri, Sakti of Indra... ... 801
Ain-i-Akbari, on Kumaon 372, 548: on the Pálas, 487: Jhúsi ... 505
Airávata, elephant of Indra 320, 801
Airavati river ... 273, 294
Airi, a local sylvan deity ... 825
Airya of the Zend books ... 275
Aitariya-Bráhmana ... 273, 277, 773
Aja, title of Vishnu 789
Ajít Chand, Rajá 582–4
Ajmer, capital of Doti... 544, 570
Akásabhájini, form of Sakti, 797, 812, 848, [894
Akása-yogini, Bauddha Sakti ... 797
Akhil-tarini, a female deity ... 800
Alaknanda river, 292, 294, 307, 321, 347, [357, 471
Al Birúni on the Katormáns of Kábul, 382, 433: on the Indian eras 413, 423, 448
Alexander the Great ... 352, 385, 450
Ali Muhammad Khán, Rohilla ... 585
Almora, site of, held by Katyúris, 534: founded, 539: fort built, 559: palace built, 570: taken by Rohillas, 587: by Gorkhális, 599: by British ... 662-65, 851

Page.

Amar Singh Kaji, Gorkháli General, 619
Amar Singh Thápa, Gorkháli General, 619, 635, 641, 665: surrenders ... 670-72, 674, 677
Amara Sinha, lexicographer ... 413
Amaravana or Jageswar, 362, 365, 368
Amazonian kingdom of Tibet ... 457
Ambastai tribe ... 357, 361
Ambika, sister of Rudra, 791, 793, 801, [812
Amgáchhi, copper plate grant. ... 489
Amitábha, the Dhyáni Buddha, 753, 759 [761
Anala, title of Krishna ... 716
Anandagiri, author of *Digvijaya* ... 767
Anasúya, mother of Dattátreya ... 805
Ananta, *sada* (lotus) 295: Nága, 298, 301, [303, 319, 895
Anderson, J., papers on Zoology ... 47, 79
Andhakas, sprung from Krishna ... 716
Andhrabhritya kings 384
Andhras, a tribe 485
Androgynous, form of Siva, 736–8: hence the linga and the yoni ... 739
Angas, a tribe 274
Ang-nyás, formula for the ... 859
Animism in the Himálaya ... 702
Aniruddha, husband of Usha, 729–30, 887
Anjani, a form of Nirriti ... 799
An-sik or Parthia, 393, 401, 402
Antaránga or duáb of the Alaknanda 434
Antelope, four-horned, Indian, 32: Tibetan 35, 45
Antigonus, the Greek ... 352, 388, 396
Antiochus, the Greek ... 352, 387-8
Ants 243
Anu, descendants of 279
Anuka Bhairava, temple of ... 777
Apara Gandaki river ... 289, 295
Aparájitá, goddess 801
Aparná, daughter of Himáchal ... 785
Aphides 259
Aphsar inscription 425
Apolledotus, the Greek 390-1, 396
Apsarás, genii 299, 300, 320, 722
Arachnida, spiders 90
Arachosia 386, 388, 392, 432
Aranyakas 270
Arattas, tribe ... 280, 376
Aravalli, range, part of Siwáliks ... 524
Arbudas, tribe ... 357, 360
Ardhánáriswara, androgynous form of Siva 736

Page.

Argeia, old name of Greece ... 276
Arhat, Buddhist priest ... 749
Aria 386–7
Arian alphabet 389
Ariana 275; satrapy of 386, 396, 490
Arioi of the Caucasus 276
Arishta, the bull demon ... 718
Arjikiya river 273
Arjuna, deity, 281, 283, 710, 712, 714, 728, [773, 777, 795
Arrian on Upper India... 392, 397
Articulata 90
Arunoda lake ... 289, 294
Aryabhatta, astronomer ... 419
Aryadeva, a Buddhist teacher ... 753
Aryaka (Irak) of inscriptions ... 276
Aryas, 272-9, 283, 732: class of Buddhist priests 749
Aryasanga, a Buddhist teacher, 753–4, 760
Asan, the month 847
Asárh, festivals during... ... 849
Asiani, Skythians 396–7
Asikni river ... 273, 312
Asitoda lake, 289, see 'Sitoda lake,
Askot, Rájis of, 365, 449: Katyúris of 455, 494-6: belongs to Doti, 496, 527: pedigree of Rajas of, 531, [537, 558, 797
Asoj, festival of the month of ... 853
Asoka, edict of, at Kálsi, 351; visit to Nepál, 364: employs Yakshas, 376 conquest, 377, 394; date of 407, 751: grove of, trees ... 315
Ass, wild, or kyang ... 35, 47
Astor, races of ... 355, 381, 436
Astronomers, Indian, borrowed much from the Greeks, 394: on the local eras ... 419, 422, 425
Asuras, genii, 280, 304, 748, 782, 787, [795, 807
Asvins, genii, sprung from Krishna, 716, [843, 894, 901
Attacori, tribe 353
Atharva Veda, 273-4, 700, 707, 734, 887
Atma Chand Rája 509
Atri, father of Dattátreya ... 805
Avalokiteswara Bodhisattwa, the Buddhist deity, 505, 752-3, 759, 761, [771, 808
Avartta, same as Heorta (?) ... 354
Aves, see 'Birds' ... ...

B.

Baber in Kábul 434
Babbler 59
Bacon-beetle 105
Bádámi inscription ... 418, 424
Badauni on Husain Khán, ... 544, 546
Badaráyana, astronomer ... 418

Page.

Badari or Badri, in Garhwál, 269: in the Bráhmanas, 273-4: other writings, 283-4, 307, 331, 357: place in history of religion, 269, 703: temples at, 466, 710, 715, 728, 768, 776, 783, 813: copper-plate grants from, 471, 484: grants to, 566, 573, 585, 591, 604
Badhán, a local deity 830
Badhangarh, attacked by Kumaon, 553, [566, 572, 580
Badger 12
Badgújars of Anúpshahr ... 558
Bádi, rope-dancer 834
Badrináth temple at Bágeswar ... 520
Bágeswar, at confluence of Sarju and Gomati in Kumaon, 305: origin of name, 317: inscriptions at 409: grants to and repairs of temples at, 541, 556, 566, 572, 591, 604, 782, 811, 849, 859, 872: old tombs at 512
Baqwath festival, 823, 870; action near, Pokhar ... 577, 601
Bahádur Sáh of Nepál ... 613
Bahat, coins found at 444
Baháwalpur inscriptions ... 405
Báhíkas tribe, 274, 280, 358, 361, 376, [781
Bahlikas or Vahlíkas, tribe, 274, 373, 384
Bahu, 279: conquered by Haihayas, 279
Baijnáth or Vaidyanáth on Gumti in Katyúr, 305, 311, 468, 519, 537, 580, 810: grants to and repairs of temple, 520, 572: inscriptions by Gangolis, 540: action near ... 554
Bairágis, as priests, 788, 802, 805, 855
Bairát or Vairát in Jaipur, 361: in Kumaon, 443, 453-4: fort of, above Kálsi: surrender of ... 640
Baisákh, festivals during ... 848
Baitarani, river and pool, 788, 925
Bakshi in the Tarái 549
Baktria 270, 241
Baktrian Greeks in the Himálaya, 341, 384; brief sketch of history: decline of their power, 386, 403, 439
Balaráma avatár as, 708, 718: aids Aniruddha 729
Balakhilyas, tribe ... 328, 349
Balbhadra, temple to 805
Balbhadra Singh, defence of Kalanga, 636: death 640-1
Bálchan, a local deity 831
Bald-coot 70
Báleswar temple, in Káli Kumaon, inscriptions at, 471, 516, 528, 810, 871: grants to and repairs of the temple, 527, 534, 542, 566, 585
Báleswar at Thal, 310, 313, 569, 872: see 'Thal' ... ...

Page.

Bali, the Daitya Rája, 284, 299, 301, 322, [719, 729, 775, 855
Bali, Saka era in island of ... 418
Ballabha or Vallabhi ... 410, 491
Bálo Kalyán Chand, Rajá, 539; set up 483-4
Balti 296
Bamian 430
Bam Sáh, chautara, Governor of Kumaon under the Gorkhális, 614, 616, 618, 624-5: correspondence with, 641, 646: defence of Almora by, 660-64: peace negotiations through ... 668, 672, 676
Bam Sáhi, family in Sor, 529; history of the family ... 532-3, 541
Bámsu, origin of name... ... 730
Bána, the Daitya, son of Bali ... 729
Báneswar, a title of Siva ... 780
Bangáras from Garhwál ... 568
Bangas, of Bengal 732
Bánpa-Nág 835
Baráditya, temple of ... 315, 804
Bárahát in Bhágirathi valley 453, 512
Bárahmandal annexed ... 534-5
Barákheri, hot-weather residence of Tarái officers, 565, 586, 588, 611: occupied by British ... 658
Barbaras, a tribe ... 279, 358, 364
Barbet 55
Bardesánes, Indika of 736
Barhal or blue-sheep ... 17, 34, 48
Barhipura, ruins in Bijnor, 453: mercenaries of ... 591, 604
Barking deer 30
Barmdeo, on the Kali, 545, 568, 570, 797
Barwaiks of the Bhábar, 589, 591
Barwing 59
Basáhr or Bisáhr, 269, 353: annexed to Garhwál ... 527, 682
Basant-panchami festival ... 857
Basantpur in Dehra Dún, 545, 563
Basava, founder of the Lingáyats ... 862
Basdeo, the king, 382, 403, 467; of coins, 405-7, 426: divinity 466-7: see 'Vasudeva' ...
Basuk, see 'Vásuki' ... ...
Batesar in the Duáb 356
Bats ... 6, 44, 46
Batten J. H. in Kumaon, 683, 689-91
Bauddhamárgis of Nepál ... 465
Bás Bahádur Chand, Rája, 559, 561-9: [606
Bázpur in the Tarái, 549; founded, 562
Bears, 9: brown-bear, black bear, sloth bear ... 9-11, 47
Beavan, on fishes of India ... 86
Bedling division of Nambúris ... 775
Bee-eater 53
Beckett's list of Garhwál Rájas ... 445
Bees 244

Page.

Beetles, 101: classification and anatomy of 102
Ben Raja 300
Benares, rebuilt by Krishna, 719, 905: captured by Musalmáns, 505: see 'Káshí' ... ...
Benfey, on the route of the Aryas, 277
Beni Tál, near Adbadri ... 313
Beni Madhab, temple to ... 313
Bems of Ladák 370
Ber, tree at Badari 783
Betáleswar, title of Siva, 810-11
Betáls of Kashmír 370
Bhábar, at foot of the hills, 459: annexed by Gyán Chand 522: 542, 548: action in Doti 571, 594
Bhadon, observances during ... 850
Bhado-sankránt, festivals of ... 871
Bhadráj (Bharadváj) near Mussooree, 805
Bhadrákáli, epithet of Durga, 794, 797, [891
Bhadra river, 292, 295: Soma forest, 295: goddess 804
Bhadras, scribes of the Katyúris, 471, 482, 516: and Pálas ... 487
Bhadráswa river, 289-90, 293-5 ...
Bhágulpur inscription of the Pálas, 481, [486
Bhágavata-Purána, 286, 291, 393, 707, [718, 726, 786
Bhagavati, goddess, 760, 802, 814
Bhágirathi river, 292, 341, 357, 788
Bhag-ling temples ... 810, 853
Bhagwán or Bhagawat, idea of ... 758
Bhairava Jhamp at Kedár ... 773
Bhairava temples in Almora, grants to 604
Bhairava worship in the Himálaya, 701-2, 762: sanctioned by Sankara, 770: oath temple, 777, 783, 797, [808, 810, 818, 849, 866-9, 920
Bhairavi, sakti of Bhairava ... 797
Bhaironáth at Benares ... 762
Bhau Dáji, 393, 410, 419-20
Bharadvája, a physician ... 274
Bharat, son of Kaikeyi ... 708
Bhárata, country, 289-90, 292-5, 806
Bháratas, tribe 277, 357
Bhárati-Chand, Rája ... 528
Bhargas, a tribe 358, 361
Bháskaráchárya, astronomer, 293, 419
Bhatneswar temple in Borárau, grant to 591, 598
Bhats of Jumla, submit to Chands. 530
Bhattárakas, priests favoured by the Katyúris, 471-2, 480, 516, and Pálas, ... 487
Bhattas, officers of the Katyúris, 471, 516
Bhattot pála, astronomer, ... 419
Bhauma, Mars, ... 886, 893
Bhaunáditya temple, ... 569, 804

Page.

Bhava, a title of Siva, 304, 727, 781, 927
Bhavabhúti's drama, 395, 860, 867
Bhavishya-badri, temple of 786, 814
Bhavishya Purána ... 286
Bhawáni, consort of Siva, 304, 322
Bhikal-Nág 335
Bhikam Chand, Rája 539
Bhikshus, Buddhist monks, 465, 749
Bhillang valley, 328, 342, 446, 524
Bhillas, tribe ... 280, 328, 777
Bhilwa-Kedár temple, 339, 715, 777, 811
Bhimá, a goddess 798
Bhima Sena or Bhishma, 281–2, 327, 506, 710, 716, 718, title of Siva 721, [807
Bhíma Sena Thápa, of Nepál, 618, 670, [674
Bhímeswar temple, 782, 810, 858: grants 591
Bhím-ghora 282
Bhím Tál, lake, 317: fort, 519, 586: action near, 605, 611, 871
Bhíshma, see 'Bhima'... ...
Bhíshma Chand, Rája... ... 539
Bhojas, 358, 361.: Kansa, king of the 718–19
Bhoksas, sorcerers 833
Bhola Náth, local deity ... 817
Bhot, the inter-alpine region, 267, 270: name of Tibet, 368, 373, 459, 492, 537: conquest of ... 566
Bhotiyas, people of Bhot, 36, 378: a tribe in Puránas (Bhotas), 485–6, [492
Bhramarshis, sons of Brahma ... 320
Bhrámari temple in Katyúr, 572: title of Durga, 796, 812: grant to 582
Bhrigu, the sage 727
Bhubáneswar, in Orissa, 858: see 'Pátála': temple in Gangoli, in Mánasa-khanda, 310, 318–22: grants to and repairs of temple, 572, [585, 598
Bhuksár-in the Tarái ... 270, 549
Bhuksas or Bhoksas tribe, 270, 371, 549 [591, 600
Bhumiya, a local deity, ... 825
Bhútapati, title of Pasupati ... 773
Bhútas, attendants on Siva, 299, 702 [722, 773, 818
Bhutesa, a title of Siva, 702, 727, 782
Bías river 294
Bibhandeswar temple ... 314, 810
Bijaya Chand, Rája 558
Bikh-sankrant, festivals of ... 869
Bikiya-ke-sain tempel... ... 315
Bilhari seized by Oudh, 585, 589: with Pathán 599
Bindusarovara, lake 289
Bineswar, a title of Siva, 776, 811
Bini Nág, temple to ... 835, 853

Page.

Binsar or Bineswar, temple built by Kalyán Chand, 585: title of Siva 776, 811
Bira Chand, Rája 519
Birbal, purohit of the Chands ... 546
Birds of the tract between the Káli and the Tons 48
Bir Sinha Deva, Katyúri Rájá ... 584
Birupaksha, story of 772
Bisaud, captured by Chands, 527, 534
Bishts employed by Som Chand, 508, 550, from Sábali, 568: with Debi Chand 581-4
Bisi, established as unit of measure, 555, [612
Bithaura, action at, with Rohillas... 612
Bittern 71
Black-bird... 58-9
Black-buck 32
Blackwall on spiders 96
Blanford, W. on geographical distribution, 2; papers on Zoology, 47-8, 73, [78, 90
Blankets, manufacture of ... 42
Blue chat 58, 60
Blue sheep, 17, 34: blue cow ... 32
Blue throat 61
Blyth, E., papers on mammalia, 45, 47: on birds, 73: on fishes ... 86
Bod: see 'Bhot' ... ...
Bodhisattwas, 752-3, 758, 761, 764, 860: Avalokiteswara, 505, 752-3, 759, 771: Manjusri, 752, 764: Vajrapáni ... 753, 759
Bolor or Chitrál ... 427, 430, 431
Bombardier beetles 105
Bon religion in Tibet 764
Borárau, capture and colonisation of 535
Borer fly 246
Bradshaw, Col., negotiates with Nepál, 631-2: through Gajráj Misr, 672-3
Brahma, unknown in the Vedas, 706-7: one with Krishna, 717: praises Krishna, 718: as umpire between Siva and Vishnu, 724: at Dakshás sacrifice, 725-8: inferior to other gods, 771: cause thereof 772: his dream ... 733, 790, 886
Brahma Gupta, astronomer ... 419
Bráhmanas ... 271, 274, 747
Bráhmanda Purána ... 286, 291, 294-5
Brahmári, Sakti of Brahmá, 801, 819
Bráhmanism absorbed Buddhism, 700, 723
Brahmapura ... 359, 362, 452
Bráhma Purána ...286, 295, 384, 806
Brahmaputra river 292
Brahma-Vaivartta-Purána quoted, 286, [735, 798, 803
Brahm-Kapál, 301, 311, 332, 784, 787
Brahuis of Sind 280
Briddh-badri temple ... 784-5, 788

Page.

Briddh Jageswar temple, 779, 811: grants to 591
Briddh Kedár temple, 314, 560, 566: grants to 585: festivals, 785, 810, 869
Brindában in Muthra 798
Broad-bill 53
Brooks, ornithological papers ...48, 73
Brysari, tribe 353
Buddal inscription 487
Buddha, Avatár of Vishnu, 708: life and teaching of, 743-50: Christianity and Buddhism, 750: Gautama, 753: in later times name alone used, 761, 886 ... 890
Budda palita, Buddhist teacher ... 754
Buddhism subdued by Bráhmanism, 723, 738: Weber on, 742: life and teaching of Buddha, 743-50: further developments 750-1, 773: magical rites and formula introduced, 755: further assimilation to Saiva practice, 761: in Nepál, 763: Maha-yána scheol, 738, 752: Mádhyamika school, 753, Yogáchárya school, 753: developed 755: Hina-yána school ... 752
Buddhist scriptures, 746: Sútra, 747: Vinaya, 748: Abhidharma or three *pitakas*, 750: Tantras ... 750
Budh, mercury 893
Bulbul 60
Bullfinch 66
Bullocks 37
Buffaloes 37
Bugs 160
Bühler on local eras 421
Bujáu, list of Rájas of, 530: occupied by the Gorkhális 649
Bunting 65
Búrhas or headmen in early times ... 508
Bush-galis of Káfiristán ... 437
Búrisho of Hanza and Nagar ...
Burmeister, on insects ... 101
Burnell, on local eras, 420: on Sankara Achárya 463
Burnouf on Buddhism, 743, 745, 750, 756 760
Bush chat 60
Butler on spiders, 96: on lepidoptera, 205: on myriapoda ... 266
Butterflies 186
Bútwal parganah, attack by Nepálese on the ... 630-34
Buzzard 51
Byáns, 310: held by Jumla, 527, 553: annexed 568: boundary with Nepál 679

C.

Caddis-flies 181
Calcutta, Káli of 797
Calendars in use in Kumaon ... 843
Calinga, a tribe 354
Cambridge on spiders 96
Campbell, on the Limbús 364, 365 (note).
Canthasides 111
Cantor, on snakes, 78: on fishes ... 86
Capricorn beetles 112
Carpenter-bee 244
Carps 83
Casiri, a tribe ... 299, 353-4, 362
Caste, origin of term (*baran*), 276: barriers broken by Saivas and by Buddhists 744
Cat, tiger-cat, leopard-cat, jungle-cat, bay-cat, 17: civet-cat, tiger-spotted civet-cat, Tarái tree-cat, 19, [45, 47
Cattle, domestic, 26: diseases ... 37
Caucasus, Indian ... 377, 396
Centipedes... 245
Cesi, a tribe 355
Ceylon, Saka era in 417
Chachait *jágír* 612
Chachak-devi, goddess... ... 274
Chait, festivals during... ... 847
Chakshu or Oxus, river, 289, 292, 401, 428
Chalukya inscriptions in the Dakhin 418, [421, 424, 492
Chamois or *gural* 33
Champáwat, in Kumaon, 314, 498, 506-7, 509, 519, 528, 534, 539: abandoned, 540, 576: occupied by British ... 654; 667; 821, 830
Chámunda, form of Nirriti 798-9, 813, [819, 867
Chanda, a goddess, 322, 331, 794, 798, 867
Chand dynasty in Kumaon, 494: story of Som Chand, 497: date of, 499: Chand rulers, lists of 500: restoration of 519: war with Doti 529
Chandálas, tribe ... 279, 282
Chandiká, goddess in the Himálaya, 702, [736, 798-9, 801, 813, 869
Chandi taluka, Hearsey's claim to ... 680
Chandpur, an old capital of Garhwál 524, [526, 570
Chandraban ... 340, 781
Chandrabansis of Kumaon 497, 503, 518
Chandrabhágá river ... 296, 302
Chandreswar, a title of Shiva ... 781
Chandraghantá, a female deity 800, 848
Chandragupta of Patna 387, 394
Chandrasila in Garhwál ... 774
Chang (Djang) Kien, marquis of Po-wang on the Yueh-ti 398, 403
Chaugarkha held by Padyár Rájputs 496, [508, 529
Charaka, medical writer ... 274
Chárauas, genii 290
Chashtana 410

Page.

Chatriaioi, a tribe 356
Chaturbúj, ruins called ... 444
Chaubísi, Rájás of Nepál ... 609
Chaudáns, 310: held by Jumla, 527, 553
Chaudhris from Jwálamukhi ... 550
Chaumu, a local deity ... 828
Chaumukhia or Chaumua occupied by the British 650
Chauras, a tribe 279
Chaurási-mal or Tarái, 546, 549, 562, 565
Chauri, tail of wild yak ... 771
Chautara Brahmans, officeholders, 508, 540; party in Nepál, 613, 641 [668-70
Chepáng, a Nepal tribe ... 367
Chhakháta annexed by Chands, 519: occupied by British ... 658
Chharaunj Dyau, a local deity ... 832
Chhipula mount worshiped, 832, 853
Chhurmal, a local deity ... 831
China, Tibetan name of, 288: map of, 289, 292: silkworm introduced from, 509: see 'Chinese'
Chínas, a tribe, 282, 356, 358-9, 365, 436
Chináb river ... 273, 293, 294
Chinese, names of Tibetan rivers in, 292: historians on Baktria and Kábul, 398: travellers, 429: Amazonian kingdom, 458: on Tibet, 459: invade Nepál 610
Chitrakáli in Mysore 775
Chitrál, Kators of, 381, Káfirs of, 384: Bolor, ... 427, 430, 435
Cho Kenkyu, lake ... 289, 312
Cho Lagan, lake ... 289, 312
Cho Mápán, lake ... 289, 312, 362
Cho Moriri, lake 289
Chough 64
Chukám occupied by the British, 648—9
Chúrakarana, ritual for 465, 902
Cicadas, insects 161
Cicones, tribe 303
Civet, cat 19, 45
Cobra 76
Cockchafers ... 108, 127
Cockroach 150
Coel 55
Coins of Baktrians, 389: Sakas, and Skythians, 403: Kanishka group, 405-8 [737-8
Colebrooke on the date of Sankara Achárya 464
Coleoptera or beetles 101
Colubrine snakes 76
Comorin, cape, from Kumari ... 772
Conæ or Ciconæ, a tribe ... 353
Coorg record on Saka era ... 418
Coot 70
Coobie 64
Cormorant 72
Cosmogony 288

Page.

Cosmos on the Huns 428
Coucal 55
Cows 34
Crake 70
Crane, demoiselle, white ... 69
Creation according to the Puranas, 299 [309, 336
Crickets 149
Criminal administration of Gorkhális in Kumaon 628
Crow 64, 72
Csoma de Körös, on Tibetan Buddhism, 760
Cuckoo 55, 72
Cunningham, A. on Asoka's edict, 351; Baktrian coins, 389: Greeks, 394-5: inscriptions, 406, 410: on local eras, 420: on Brahmapura, 453: on Govisana, 462: Pála inscriptions, 489: Ladák ... 860
Cunningham, (J. D.) Notes ... 293
Cup-marks in Kumaon ... 352
Curlew 69

D.

Daba temple in Hundes ... 573
Dadhíchi, the sage 725
Dæmonism in India, 699: 702-3 connected with Saiva worship, 721-7: Sivaism is a form of, 733: affiliated to their systems by both Saivas and Bauddhas, 738, 754, 756: admitted to the shrines, 766: the Bonpos of Tibet, 765: Sákta forms, 790, 794: village and local deities ... 814, 34
Dahæ Skythians ... 396, 401
Dahia 401-2
Daityas, genii, 277, 280, 290, 296-9, 715, [719, 729, 786
Dakhini priests in Kumaon and Nepál, ... 465, 466, 787-8
Dákini, a local deity ... 833
Daksha's daughters, 299: sacrifice, 301, 304, 725, 734: account of Siva 722
Dakshinácháris, the Sákta ... 865
Dambodbhava 283
Dámodara, title of Vishnu 789, 906
Dámodara Gupta 425-6
Dánavas, genii, 277, 290, 296-9, 512, 721, [748, 777
Dándi Paramahansa fakírs ... 787
Dánodhar, in Kachh ... 865
Danpur, given to Nágas, 318: held by Katyúris, 519, 537: annexed, 541
Daradas, people, 279, 282, 353, 355, 358, [362, 378
Darapsa 403
Dard dialect 381
Dardæ tribe ... 354, 359
Darel or Tieh-lo 429
Darkot in Nepál, ... 609

	Page.
Dárma belongs to Doti, 496, 527; annexed, 553: taken by Gorkhális	609
Darogha or Chamberlain, duties of,	560
Dárún near Almora, 301—3, 313, 317, [358, 362	
Darvas, a tribe	279
Dása, see 'Dasyas.'	
Dasaratha, Rája of Ayodhyá, story of	708
Das-námi. Dandins, ascetics, 768, 775, [778, 783, 805	
Dasyas of the Vedas, 272, 275, 279, 283, [364, 439, 732	
Datiehæ tribe	356
Dattátreya avatár 706,	805
Dáúd Khán with Debi Chand, 581: his death 582,	585
Da-wan or Yárkand	401-2
Day, on the fishes of India ...	86
Da-yue-ti, country of the great Yueh-ti	401
Deaths from wild animals	14
Debi Chand, Rája	580-2
Deer, swamp, 28: Sámbhar, spotted, 29: hog, barking, 30, 45: musk,	31
Dehra Dún, early history of, 337, 523: Timúr's campaign, 524-6: annexed to Garhwál, 527: invaded by Husain Khán, 545: by Khalílullah Khán, 562, 573—8: Rohillas, Gújars and Sikhs, 576-80: by Gorkhális, 616, 619; administration by Gorkhális, 620: invasion of the Dún by the British, 634-41: annexed, 680: Pítam Sáh's claim to the Dún, 682: Hearsay's ditto	680
Demetrius, king of the Indians, 388, 392, 397: of Syria ...	589
Deo-dhúra in Kumaon ...	281-2
Deoprayág	342
Devaki, mother of Krishna ...	712
Deva Kúta mountain	296
Devasringa mountains ...	294
Devika river (Ghágra) ...	294
Devikota, in the Carnatic ...	730
Dewalgarh, an old capital of Garhwál 524, 526,	603
Dhalíp Chand, Rája	557
Dhanadá, a goddess	889
Dhanañjaya, 299: form of Krishna,	716
Dhani, in Nepál, 609: near the Indus	359
Dhaniya Kot held by Káthi Rájputs	496
Dháranis, magical formulæ ...	755-7
Dharma, title of Krishna, 716, 728,	789
Dharma avatár	707
Dharmadatta, story of ...	772
Dhátri, 299: title of Krishna ...	716
Dhaula, form of Káli ...	797
Dhikuli ruins on the Kosi, 454: evacuated by Gorkhális ...	648
Dhiyárs of Jammu	379
Dhritaráshtra, the Kuru, 710,	732
Dhriti, a goddess	884
Dhulek in Nepál	609
Dhutpápa river (Kaggar) ...	294
Dhvajpatikeswar in Askot, 310,	851
Dhvaj peak	310
Dhyánas, or stages towards *Nirvána*, 753, 755: in ritual ...	895
Dhyáni-Buddhas ... 753, 758, 760—	1
Dhyánirau, early Chand possession, [537, 587	508,
Digambara Jainas	420
Dikpálás, genii 886,	898
Diodotus of Baktria	387
Dimri Brahmans 788,	802
Dípa, form of Durgá ... 796,	850
Díp Chand, Rája 589-97,	643
Díp Chandeswar, temple of ...	810
Dipáil in Doti 548,	571
Diptera, order of insects ... 100,	255
Distribution, law of	267
Diti, mother of Daityas 299,	801
Diving-beetles ... 105,	120
Diwali, festival	851
Dobhal Brahmans	788
Dobson, papers on bats ...	46
Dog, wild in Kumaon and Kashmír, 21, 45: domestic ...	43
Domestic ritual in use in Kumaon...	872
Domkot, Khásiya Rájas of 494, 498, 507, [510,	516
Doms of Kumaon, 368: on the Indus and in Kashmír, &c. ... 370-1: 436, 439,	819
Dor-beetles	108, 127
Doti, possessions of, in Kumaon, 496, 503, 508, 527, 528: war with Chands, 529, 530: list of Rájas of, 531: war again, 533, 539, 541: Musalmán invasion of, 544: loses Kumaon, 553, 568, 570: war again, 582, 586: intervenes in Kumaon, 601, 607—9: Prithipat Sáh, Rája of, 647; killed in action 656-7: Bam Sah's designs on, 669,	674
Dove, turtle, ring, spotted 67,	72
Dowson, on Mathura inscriptions ...	406
Dragon-flies	180
Draupadi and the *Pándavas* ...	281
Drávíras, people ... 279, 282,	485
Drishadvati or Kaggar river, 272,	294
Drona, preceptor of the *Pándavas*, 282: mountain, 313, 314, 520,	781
Droneswar, a title of *Siva* ...	781
Drongo, shrike	57
Druhyu, descendants of ...	279

Page.

Duck 71
Duli Chand or Himmat Gosáin ... 585
[607, 609
Dulu Rája's inscriptions, 503, 516, 519:
Dunagiri, mountain, 313-14: above Dwára, 313-14, 520, 570, 587, 832
Duncan, on insects 101
Duncker, on Vaidik dates ... 271
Dungari, head village of Phartiyáls, 508
Dungariya, a sorcerer ... 820, 824, 826
Dung-beetles ... 107, 125
Durbáshtami, observance ... 852
Durga, 304, 322, 710, 736, 764: temple to 794-5: 800, 872, 894
Durga-rája, mountain 295
Durvásas, the sage 805
[721, 732
Duryodhana, the Kuru... 713, 715, 716-17, [570, 782, 789
Dwára Hát in Kumaon, 512, 520, 550, [789
Dwáraka in Gujrát, 281, 719, 730, 768,
Dwípas of the world 288

E.

Eagle 50
Egret 70
Ekádasi or eleventh, festivals of the, 848 *et seq.*
Ekapadá 362, 376
Ekapátalá, daughter of Himáchal ... 785
Ekaparna, daughter of Himáchal ... 785
Ekásur, title of Siva ... 782, 811
Ekvírya, a divine mother ... 762
Elephant, 26: mode of capturing the, 27
Elliot, H. M. on Katyúris ... 381
Emodus 279, 353, 396
Emúsha, boar incarnation ... 707
Entomology 96
Ephthalites or white Huns ... 427
Epic period 272: poems ... 722
Eras, Parthian, 387, Seleukidan, 387, 406: Kashmíri, 406: of Vikramáditya, 406, 410-25, 581: Sáka 406, 410—25: of Kanishka, 408: of Asoka, 407: of Buddha's Nirvana, 408: of Hansin China, 409: Ballabha, 414: Gupta, 414: of Sri Harsha, 414: Nepál 845: Kali, 413, 505: Yezdegird, 414: in Java, Siam, Tibet, 418: Jaina, 420: Julian, 425: of the *Vijaya-rájya*, 491—2: dating from accession of the monarch, 491: of Vikramáditya, follows luni-solar year, of Saka, solar year 845
Erán inscription 417
Erin name of Ireland 276
Ermine 12
Ethnography of Vedas, 274: of Puránas 357

Page.

Eukratides of Baktria 389
Euthydemus of Magnesia, 388, 396

F.

Fah-Hian, Chinese traveller, 399, 408, 429, [430, 758
Falcons 50, 72
Fantail 57
Fateh Sáh, Rája of Garhwál ... 573
Fayrer, on snakes 78
Fergusson on Mathura inscriptions, 406: Vikrama era 425
Finch 66
Fire crest 62
Firishta on Kumaon ... 450, 542
Fishes, 79, 86: in the Dún, 80: poisoning 82
Fleet on the Sanvat dates, 420, 491
Flies 259
Floriken 68
Flower-picker ... 56, 63
Fly-catcher 57, 58
Flying-fox 6
Food, ceremonies connected with the preparation of 933
Forests, insects destructive to, 109, 113
Forktail 62
Fox, *hill*, Indian 22
Fraser, J. B., on Garhwál, 621: the Dún, 621: Gorkhális, 626: on Kalanga ... 636, 638.
Funeral ceremonies (see 'Sráddha'): 917: last service for the dying, 919: preparing the body for the pyre, 920: the cremation, 921: subsequent ceremonies 923-32

G.

Gabhastimat, part of Bhárata ... 293
Gadadhar, title of Krishna ... 887
Gadflies 258
Gadwall 71
Gágar, range of hills, 316: Khasiya Rája of, ... 539
Gágás river 314
Gaja-saila mountain 297
Gajawa, last of the Khasiya Rájas ... 539
Gajráj Misr negotiates peace with Nipál ... 670, 672, 674
Gall-gnats 258
Gall-insects 246
Ganai, Katyúri inscription, 520: pass to Garhwál 570
Gananáth temple in Bowaran, 303, 591: action at, death of Hastidal 660, 848, 856
Gandak river 281, 289, 294-5, 310
Gandhamádana mountain, 283, 289, 294-5, [312 332, 728, 776, 788

Page.

Gandhára (Pesháwar), 274, 353, 359, 373, 386, 405, 427, 430: capital of, 431: people of ... 274, 280, 719
Gandharva, portion of Bhárata ... 293
Gandharvas genii, 290, 297, 299, 300, 716, [748
Gandhávati, title of Váyu ... 292
Ganesh, 702-4, 724, 788, 762-3: temples, 799, 803: grants, 585: sanctioned by Sankara, 770, 784, 850-7: ritual for service of, 877: names 883
Ganga, sister of Párvati ... 802
Ganga-dwára 338
Ganga-náth, a local deity 819, 850
Ganges, 272, 292, 294: valley in Puránas 338
Gang-gu country 401
Gangoli, Rájas of, 496, 527, 537, 540, 797: temple at Hát ... 866
Gangri mount ... 289, 311
Gárdevis, water-sprites ... 832
Gardner, Honorable E., appointed to charge of negotiations with Kumaun, 642, 646: in charge of political relations, 648, 659: Commissioner of Kumaon, 667, 672: political offices ... 678
Gardner, Lieutenant-Colonel, appointed to command force intended for the invasion of Kumaon, 645 [648-59
Gardhabhilla tribe ... 384, 419, 423
Garga, astronomer 394
Garhwál Rájas, list of ... 445, 526
Garhwál conquered by Pálas of Bengal, 482: Mallas of Nepál, 512, 515, 523: seat of Government, transferred to Dewalgarh, 524, 543, 549: attacked by Kumaon, 553, 556, 562, 566: attacked by Musalmáns, 562-4: Báz Bahádur captures Srinagar, 568: alliance with Doti, 570: successive invasions, 571: Jhoshiyána raid, 577, 603: annexed by Gorkhális, 615, 619: slavery, 620-22: annexed by the British, 667: arrangements with Rája of 680
Garibnáth Siddh, local deity, ... 817
Garuda-áśrama, a name of Badrináth, 471
Garuras tribe of genii, 296, 299, 748, [784
Garur Gyán Chand Rája, 503, 519, 521, [548, 817
Garuri river 305
Garura purána, 286: temple to 804: story of ... 804-5, 836, 887
Gatera, action with Gorkhális at ... 609
Gauras, a tribe 485

Page.

Gauri mountain, 310, 312: consort of Siva, 304, 327, 790, 793, 797, 806, [813, 869, 884, 907
Gauri-kund 311, 327, 345
Gautama, the present Buddha ... 753
Gaya, Pála inscriptions ... 489
Gáyatri verse ... 849, 875
Gazelle, Tibetan 35
Geographical distribution of animals and insects, 2: birds, 48: fishes, 79: spiders, 93; beetles ... 96
Gerard's travels ... 293
Gervais on spiders 96
Ghágra river 294
Ghantakarn, deity, 340, 342, 784, 816, 853
Ghantuwa, or astrologer, ... 824
Ghatku debta, see 'Ghatot kacha'
Ghatotkacha, 506, 807: temple, 807-8, 810: grant, 585: festival, 854
Ghazni, school of magic ... 754
Ghi-Sankránt 871
Ghugutiya-festival 872
Ghulám Kádir in the Dún, 578-80
Gidhiya or Gandaki river, ... 507
Gilgit, races of, 355, 381, 404, 431, 435: river of 429
Gillespie, General, defeat and death at Kalanga in the Dún ... 637
Girbán-judha, Vikrama Sáh Nepál, 614, 619
Girisa, title of Rudra ... 720
Glass-making introduced ... 428
Glow-worm ... 265
Gnats 258
Gont, forest or *thár*, 33, 45, 47; wild ox *tehr*, 33, 45: domestic ... 40-1
Gobardhan, title of Krishna ... 897
Godwin-Austen on birds ... 73
Gokarna in the Bombay Presidency, 304, [781
Gokarneswar, a title of Siva ... 781
Golám, in Nepál ... 609
Gold-digging ants of Herodotus, 376, 458: washing in Kumaon ... 543
Golden beetles ... 116, 148
Golden finch 66
Gollas, king of the Huns ... 428
Goldstücker on Apsaras, 229: on Mahábhárata 722
Gomal river 273
Gomati river (Gomal), 273: (Gúmti) 294, [304, 317, 468
Gondophares, the Parthian ... 406
Goose 71
Gopeswar, 330: inscription, 511: trisúl 330, 513, 776, 810
Gorakhnáth, a religious reformer, ... 505 [808, 811
Gorakhpur district, attack by Nepálese on the, 630-31: force from, destined for Kathmándu ... 634, 670

Page.

Goril, a popular local deity, 520, 821, 854
Gorkhális, origin of the name, 607: invade Kumaon 609: administration of, in Kumaon, 612: annex Garhwál, 615: Dehra Dún, 616: administration of Garhwál, 618, 619: of Dehra Dún, 620-22: in Kumaon, 623-5, 654: of justice, 626: causes of the war with the, 630-4: opening operations, 635: expulsion from the Dún, 635-41: from Kumaon and Garhwál, 664: their account of the war, 665, 692: treaty 679
Gorresio on the Rákshasas ... 735
Gosáin, title in Kumaon, 532, 536, 550: see Dasnámi.
Goshawk 50
Govinda, name of Krishna, 712, 717, 887, [906, 913
Govisana, visited by Hwen Thsang ... 461
Gowan, Colonel, Commissioner of Kumaun 687
Grasshoppers 140
Gray, papers on mammalia ... 44-5
Grebe 72
Greeks in India, brief sketch of Bactrian History, use of the Greek language, decline of their power, 385, [400
Green shanks 69
Greig, G., local notes on mammals 4
Gross beak 65
Grouse, sand 67
Guha, name of Kárttikeya 299, 802
Guhjeswari, Nepálese goddess 465, 764
Gújars in Dehra Dún ... 576-80, 616
Gunádhya, retires to Badari ... 284
Gunas, the, or qualities 735, 742
Gún beetles 110
Gunther, on Tibetan fauna ... 47
Guptas Dámodara, 362, 394, 409-10, 425
Gupt-káshi 337, 348, 775
Gural or chamois 33, 45
Guravas, a priestly caste at Saiva shrines ... 487, 491, 734, 739
Gurjara-grant of Jayabhata ... 421
Gur-La mountain 308, 311
Gushan tribe of the Yueh-ti 400, 403
Gutima in Nipál 609
Gwai-shiu or Oxus 401-2
Gwála dynasty in Nepál ... 772
Gwáldam, action near ... 554
Gyán Chand Rája, 571, 582
Gymnosophoi, sages 356

H.

Haan on spiders 96
Háfiz Rahmat Khán invades Kumaon, 586, [590, 593-95, 735

Page

Haihayas, tribe 279
Haimavati 790
Hairis, brought in by Báz Báhádur, 565, 589: in the Tarái ... 645
Haláhala poison 320
Halduwa, action near, in the Bhábar, 597; festival 869
Hamilton-Buchanan, fishes of the Ganges 86
Haug on Vaidik dates 276
Hanley on shells 90
Hanumán, the monkey god, 763: temples 804
Hara, a title of Mahádeo, 714, 727, 729, 733: a local deity ... 830
Harakdeb Joshi on the Chand chronology, 503: his apprenticeship, 590: services, 594-7, 601: defeated and flies to the plains, 604-6: intriguess with Gorkhális, 609-11: retires to Hardwár, 616: with British, described, 646, 654, 657, 667: death, 647 (note).
Hardwicke's list of Garhwál Rájas,... 445
Hardwár, 281, 338, 358: Timúr at, 524: Nágar Dás, chief of, 563: Rohilla raids ... ... 577-8.
Hare, 25, 45, 47: mouse-hare ... 26
Hari, a title of Vishnu, 298, 714, 716, [728, 733, 747, 789, 849, 856.
Haridungari hill near Almora occupied by British troops ... 663
Hari Rám Joshi of Jhijár, 590, 592-593: death of ... ... 594.
Háriti, a goddess ... 763, 800
Harivansa ...384, 785, 794, 800.
Harivarsha ... 278, 289, 293.
Hariyáli, a female deity ... 800
Harkiyas of Kumaon 370, 869.
Harnandá, a female deity ... 801
Harrier 51
Harsewak Rám, mahant at Dehra... 619.
Hastidal Sáh, Chautara, Gorkháli General, 619, 620, 642, 645, 656: death in action at Gananáth ... 601
Hastinapur in Meerut ... 280, 281, 297
Harela festival 870
Háwalbágh, action between Harak Deb and Mohan Sing near, 604: British occupy ... 652, 661
Hawk-moths ... 188, 214
Hayasmánas tribe ... ... 296.
Hearsey on the Gorkhális, 625: aids in the invasion of Kumaon, 645, 648: early operations successful, 655: defeat and capture at Khilpati, 656: advice to Gorkhális, 666: claim to Dehra Dún ... 680.
Hedge-hog 9, 47

Page.

Hema kúta, 289, 294:—Sringa ... 295
Hemiptera, Homoptera, and Heteroptera ... 100, 158
Hepthalites, see 'Epthalites.'
Heraus the Saka 403
Herbert quoted 292
Heris: see 'Hairi.'
Hermann, German name ... 276
Herodotus and the gold-digging ants 376
Heron 70
Hidimbá, the Rákshasi 506, 807
Himáchal, father of Párvati, 271, 294, 304, [306
Himádri khanda 304
Hima-kadphises ... 401, 404, 405
Himálaya of the North-Western Provinces not an isolated tract, 268: in the Vedas, 270: in the Bráhmanas, 273: in Puránas, 285, 287, 289, [294, 301
Himávat, 273, 289, 354, 832: see 'Himálaya.'
Himmat Gosáin, insurrection by, 385, 386
Hina-yána school of Buddhism: see 'Buddhism.'
Hinduism, definition of ... 700
Hindu-kush ... 275, 296, 297
Hiranmaya ... 285, 289, 393
Hiranvat, son of Agnidhra ... 293
Hiranyagarbha 706
Hiranyakasipu the Daitya, 299, 786, [787
History 267
Hiung-nu of the Chinese writer, 369: drive out the Yueh-ti ... 398
Hládini river 292
Hoang-ho river 292
Hobby 50
Hodgson, B. H., on the Kirántis, 365: on Nepálese Buddhism, 764: on Zoology ... 44, 47, 72
Hog, 28, 45: deer 30
Holi festival 867
Holtzmann on Vikrama era ... 245
Honey-bee in the hills... ... 245
Honey-sucker 55
Hoopoe 56
Hornbill 53
Hrishikesha, title of Krishna, 709, 717, [718, 789
Human sacrifices 867
Hume, A. O., paper on a new sheep, 47: ornithological papers ... 73
Hunas tribe, 270, 356, 358, 360, 362 (note), 365, 369, 384: at Maushari, 425: white Huns, 427, 428, in inscriptions, ... 485, 487
Hundes 369
Huniyas ... 270, 360, 362, 369
Husain Khán, Tukríyah ... 543

Page.

Hutú Kotu, brother of the Tibetan Láma 610
Huvishka or Hushka, 405, 407, 737: worshipped 832
Hwui Seng on Ye-Tha... ... 437
Hwen Thsang on Srughna, 352: Kábul valley, 400, 408: on Vikrama, 423: on Kanauj, 424: travels, 431: in Kumaon, 451, 461: Nepál ... 514, 753, 754
Hyæna 18
Hybernation of bears 9
Hydaspes river 273
Hymenoptera order of insects 160, 239
Hyperboreans of the Greeks ... 279

I.

Ibis 71
Ibn Haukal on Kábul ... 432
Ibn Khallikán on Kábul ... 432
Ice supply to Almora, 555: to Delhi, 561
Ijikas tribe ... 354, 364
Ikshu river 292
Ilávrita country ... 289, 293
Imaus mountain 354
Im-tsai, a city ... 401, 402
India, Tibetan name of, 288: Chinese names of 403
Indians of Kábul 433
Indo-skythians, 280, 300, 373, 384, 392, (note), 396, *et seq.* 429, 426
Indra, 275, 276: dwípa of, 293: in the Vedas, 705, 748, 790, 806, 836, 894
Indráni, female deity 907
Indraprastha 281, 411, 443, 450
Indus in the Vedas 272, 292, 297, 353
Inscription at Bágeswar ... 469
Insects, their study, anatomy, classification, 96: destructive to timber and grain ... 109, 112
Ira, mother of vegetable kingdom ... 299
Irán, name of Persia 276
Irávati river 273
Isa, the deity 895
Isamus 313, 391
Isána deity, 292, 717, 780: as Siva, 802, [927
Iskardo 431, 435
Islám Sháh and Kumaon 537, 538
Istakhri on Kábul 431
Itihása period ... 272, 278

J.

Jacana 71
Jackal 20
Jæschke on the Bons of Tibet ... 767
Jagannáth, temple to 810
Jagariya astrologer 824
Jagat Chand, Rája 572

Page.

Jageswar in Kumaun, 301-3, 362, 492, 511, 530, 552, 587-8: grants, 566, 569, 582, 585, 590-1, 598, 770: temples at 778-80, 811, 859-60
Jai Kishan Joshi of Jhijár, 590-92: minister, 594: murdered ... 597
Jaina legends 384, 419, 420, 422
Jainas in the hills 842
Jainda Királ, story of, the Sor settlement officer 532
Jaithak, surrender of ... 640-1, 665, 670-1
Jambávati, story of ... 710. 721
Jamadagni, sage 894
Jambha, the demon 718
Jambu dwípa ... 288, 293
Jammu, Rája of, builds temple in the Dún, mercenaries 591
Janaka, king of Mithilá ... 724
Janamejaya, 297: in the Mahábhárata, 723
Janárdana, title of Vishnu, 727, 747, 887
Jángalas, tribe ... 358, 364
Jangamas serve at Madh, 775: descendants at Jagesar, 780: their tenets and teaching ... 862-4
Janmáshtami observances ... 850
Janmotsava, ritual for ... 891
Jarásandha of Magadha, ally of Kansa 718-19, 732
Jaspur, in the Tarái, 549: in Páli ... 592
Jassa of Kamlekh, story of ... 523
Jat-karma, ritual for 887
Játudhi mountain 295
Jauntgarh, defence of 640
Java, Saka era in 418
Jay 64
Jaya, epithet of Durga 794, 796, 891
Jayakrit Sáh of Garhwál 577, 602
Jayanti, a form of Durga, 796, 858
Jerdon on mammals, 4: birds, 49, 72: ants, 246: fishes ... 86
Jeth, festivals during 859
Jhalrapatan, sanvat inscription ... 420
Jhanankár, a local deity 801, 811
Jhánsi, founding of 504
Jhelum river 273, 294
Jhijár Joshis, 559, 567, 585: *see* 'Sib Deo Joshi.'
Jhúsi, near Allahabad, story of, 498, 503, 506: inscription ... 504
Jileswar, temple to Siva, as ... 811
Jinas, deities of Nepál ... 518
Jivani, name of Agni ... 292
Jodha Singh, Katehiri intervenes, 594, 643
Joginis, nymphs 796
Jogis, sect of, as priests 773, 783, 815, [818
Jokhai, a local deity 819
Joshimath, 332, 382, 451, 457: Katyúris of, 467: Rainka's customs-post 515, 739, 768, 786

Page.

Joshis employed by the Chands, 508: come to Almora, 540, 550: of Galli and Jhijár, 559, 560, 567: Birbhadra and the Bishts, 583: of Duniya, 593: the Joshyál ... 605
Joshiyána-raid into Garhwal 577, 603
Jubu, cross with a yak ... 38
Juhár country, 318, 567: the colonisation of 455, 527, 553, 609, are 'Phartiyáls,' 611: oppose Harak Deb 617
Jumla, Rája of, held Byáns, 527, 530, [553, 606, 608-9
Jumna river, 275, 294, 326, 337, 341, 349, [354
Juniyagarh captured by Kumaonis, 566, 572
Jwálpa, form of Durga, 796, 812, 869
Jwála-mukhi 295, 311, 555
Jyotishmat, Rája of Kusa ... 296

K.

Kabír, the teacher ... 808
Kábul river, 273: valley, 273, 297, 377: history of towns of 385, 431, 430-37
Kadaphes ... 403-4
Kadphises, 403—5: coins of ... 737
Kádruveyas, genii, 297, 299, 804, 836
Káfi Khán on Sulaimán Shikoh ... 564
Káfirs of Káfiristán, Rum division, 358: Wai and Bush divisions, 437: inhabitants 386, 435-40
Kaggar river 294
Kaikeyi, mother of Bhárata ... 708
Kailakila Yavanas ... 384, 393
Kailás, the abode of the gods 285, 294, [301—2, 304, 308, 567, 802
Kairárau captured and colonised ... 535
Kaitabha demon 298, 716, 795
Kákáchal in Tihri ... 340, 357
Kála chakra, Buddhist work ... 760
Kalachuris of Kalyána ... 862
Kálajit, title of Siva 782
Kálaka, legend of Sakas 406, 419
Kálakanjas, tribe 299
Kálakoti Rajpúts 496
Kálanábha Dánava 299
Kalanga in Dehra Dún, first attack on, 635: second attack and capture ... 637
Kalar, Brahman ruler of Kábul 382, 433
Kalasa-sthápana, ritual for ... 885
Kál-Bhairav at Tungnáth ... 762
Kal-bisht, a local deity 828
Kálchanbhausi, a local deity ... 831
Káli, a goddess, 305, 322, 506, 736, 794: temples to 797-8, 819, 881
Kálika 340
Kálikā, Purána quoted, 730: Devi, temple to, 813: Sítala temple Dwára, grant, 585, 591: temple in Gangoli, grant ... 591, 597

Page.

Káli Kumaon, or along the Káli ... 506
Kálinág, temple to ... 813, 835
Kalingas tribe, 294, 359–61, 485, 492, [719
Kálki avatár of Vishnu ... 707
Kalmatiya (Kalimath) hill near Almora, 315, 336: action near ... 662
Kalpeswar 330, 770, 775, 785, 811
Kál Sain, a local deity ... 831
Kálsi, in Dehra Dún ... 251
Kalyán Chand, Rája, 539, 584–9, 643
Kalyáni Devi, temple to 812, 891
Kámadeva's birth ... 305
Kámadhenu, cow of the gods, 314, [318, 320, 363, 771, 918
Kamádki, local deity ... 801
Kamaleswar, temple in Srinagar, 346, 575 [778, 811, 856, 858
Kámarúpa ... 357, 360
Kámbojas, tribe, 274, 279, 282, 358, 418
Kámdárs or courtiers appointed ... 508
Kamín or headman 537
Kánadeo ... 310, 313, 506
Kanak or Kank of Kábul, 382, 433, 448
Kánana, country 296
Kanauj, 356, 361, 373, 497–8, 504: Rathors of
Kanchi or Conjeveram 772
Kanerki ... 403, 405–6, 436
Kanka, Vaidúrya mountain 294
Kankeswar, temple to Siva, as 811
Kankhal 804, 339
Kanishka, 403, 405–6–8: 420, 432, 449: [coins of, 737–8
Kánphata Jogis, 773, 802, 808, 817: tenets and teaching ... 865
Kansa, slain by Krishna, 712, 718, 794
Kans-Mardini Devi ... 346, 794
Kantha (Sháhjahánpur), 313, 542, 545
Kantipur in Nepál 515, 516, 607
Kan-to-lo or Gándhára, 427: see 'Gándhára.'
Kanya-Sankrant, festivals of ... 871
Kaofu or Kábul, 400, 409: see 'Kábul.'
Kapáli, epithet of Durga ... 794
Kapardin, title of Rudra 720, 737
Kapisa, in the Kábul valley ... 431
Kapilá, epithet of Durga ... 794
Kapila Muni, philosopher, 299, 741, 748, 754: temples to, 575, 806, 811
Kapileswar, temple to Siva as in Dúg, 810: grant to 598, 806
Kapinjala mountain, 295: king, 297
Kareja mountains ... 296
Karait, venomous snake ... 77
Karáli, epithet of Durga 794, 798
Karbírpur in Kumaon 468
Karkotak the Nága, 299, 374: temple to 832, 851

Page.

Kark-Sankránt, festivals of ... 870
Karle cave in Bombay 762
Karmajít, title of Siva 782
Karna, king of Madras 713, 807
Karna-bedh, ritual for ... 892
Karnáli river ... 292, 311, 312
Karnátaka (Carnatic) ... 511, 515
Karnátas, a tribe ... 486, 511
Karnávati Ráni in the Dún, 526: in Garhwál 776
Karnprayág ... 297, 313, 336, 792
Kar-nyás, formula for the 859, 875
Kartcha or Khie-pan-to ... 429
Kárttik, festivals of the month of ... 855
Kárttikeya's birth, 297, 302, 313, 469, 729: on coins, 737–8, 761, 799, 801: temples of 802, 850
Kárttikeyapur in Kumaon, founding of, 357, 468, 471–2, 483, 502, 519, 553
Kárúshas tribe ... 357, 360
Kaserumat, part of Bhárata ... 293
Kashgár ... 377, 399, 401, 426
Káshi ... 304, 307, 356, 719, 731, 775
Káshípur, trading factory at, 642: force destined to invade Kumaon formed at, near Govisana, founded by Káshi Náth, 462, 549, 581, 586, 589: Hari Rám governor, 590, 592: Sib Deo murdered, 594: Siromani Dás, governor, 590, 596
Kasherus, tribe ... 353, 378
Kashka in Nepál 609
Kashkára, Doms of, 370, 377: Káfirs of, 386, 426, 435–41: valley of [295–7, 379, 381
Kashmír, 273, 289, 295, 297, 353, 370, 377–8, 423: school of magic 754, 760, 768
Kashmíras tribe, 275, 278, 353, 358, 400
Kasia regio 377
Kasyapa Rishi, 299, 304, 804, 912
Katár or dagger sign-manual 557, 566
Katármal, 315: occupied by the British 652, 665
Katehir, Rájputs of, 466, 494: country of, 521, 546–7, 561: rája of 582, 588
Kath-ki-nau, occupied by the British, 649: Káthi Rájputs of Phaldakot, [496, 519, 527, 536
Kathmándu in Nipál ... 516, 607–8
Katolgarh or Kotalgarh, on the Káli, 507–8: action with Gorkhális near, 609: unsuccessful siege of, by Hearsey, 657: origin of names, 730
Katormáns of Kábul 382
Kators of Kábul, 381–82, 425, 434–5: of Kumaon ... 468
Katuris: 'see Katyúras'.
Katyáyani, epithet of Durga, 794, 848, 905

Page.

Katyúris of Kumaon, 365, 381, 439–41, 449: founder of the, 467, 779: Bisaud, 527, 534: of Páli, 454, 536: Sui, 494: Askot, 455, 531: Bárahmandal, 494: Doti, 455, 530: Syúnara, 527, 535: Dánpur, 537: decline of the, 493, 519: last reigning family of the, 553, 568: worship of the ... 831
Katyúr Patti in Kumaon, 468 *et seq.*
Kanheri inscription ... 410
Kaulagarh, old capital of the Dún, [526, 562–3
Kaurma-Purána, 286, 304, 776: avatár ... 299, 708
Kausalyá, mother of Ráma ... 708
Kaushítaki, Bráhmana ... 273
Kausiki river, 294, 315, 365: goddess, 794
Kauveri, Sakti of Kuvera ... 801
Kechara, tírtha on the Karnáli ... 311
Kedár, captured by the Pálas of Bengal, 482: by the Mallas of Nepál, 512, 515: see 'Kedárnáth.'
Kedára-Khanda, 287, 304, 323
Kedárnáth, 269, 282, 284, 326, 348, 466, 492, 561: grants, 585, 591: place in history of religion, 703: origin of name, 739: death of Sankara, 768: Saiva worship, 770: temple of, 773, 798, 806, 811, 858
Kekaya, king of ... 358–9, 373
Kelu Pír, festival of 850
Keshava, name of Krishna, 712, 714, 887 [905
Kestril 50
Ketu, comet ... 299, 886, 893
Ketumála, country ... 289, 292–93, 295
Khabísh, a local deity ... 820
Khagmara, Katyúri fort on Almora hill 534–5, 538
Khagúna dialect 437
Khandaparasu, a title of Rudra ... 728
Khándava forest near Dehli ... 281
Khandoba affiliated to Siva ... 738
Khanjar or dagger sign-manual, 557, 566
Kharkhu revolt 558
Khasa, mother of the Yakshas ... 299
Khasas or Khasiyas, a Hindu tribe in Kumaon, 268-70, 280, 282, 291, 293, 299, 353, 355, 359, 362, 371: summary, 375-81, 439-42, 485, 496: revolt of the, 509: list of Khasiya rájas in Kumaon, 510, 518-19, 527: revolt, 528, 539, 553: name given to Thápas in Nepál 668, 756
Khasíras tribe ... 353, 358, 362
Khasiyas see 'Khasas.'
Khasiya Brahmans in Kumaon, 734, 775, 783, 788, 802, 806, 816, 818

Page.

Khatakwáli, caste of courtesans ... 529
Khataruwa festival 871
Khawás Khán in Kumaon ... 537-8
Khilpati, defeat of Hearsey at, 657, 800
Khimál, a female deity ... 801
Khingalatchi, the Rákshasí ... 756
Khiu-tsi-hi of the Gushan tribe, 400, 404
Khos of Chitrál ... 435, 439-41
Khosas of Sind, Khasas, 379, 449
Khoten ... 401, 428-9, 452, 458
Khúrbura, action with Gorkhális near, in Dehra Dún 617
Kikatas tribe 274
Kiligarh or Kaulagarh, old capital of the Dún ... 526, 562-3
Kilpuri in the Tarái, 549, 599: annexed by Gorkhális, 612: by Oudh 612
Kimpurusha country ... 289, 293
Kingfisher 53
Kinnaras, genii ... 295-7, 748
Kipin in Kábul, 295, 297, 353, 399, 430
Kiránt-desa in Nepál ... 364-65
Kiránteswar, a title of Siva ... 778
Kirátas tribe, 279, 282, 354, 357, 363, 365, 485: list of rájas in Nepál, [510, 518-19, 607, 732, 772, 777-8
Kirati Chand, Rája 533
Kiratipur in the low country ... 537
Kirby and Spence on insects ... 101
Kirtipur in Nepál 608
Kishan Singh, Rautela, 595, 597
Kissia of Herodotus or Susa ... 377
Kite 51
Kitolo, king of the Yueh-ti, 427, 430
Klaproth 292
Koch, on spiders 96
Koel 55
Kohala 358, 370
Kohistánis of Kábul 432
Kohlís of Kunáor 370
Kohrúr, battle of 425
Kokarasi, a local deity ... 832
Kokla pigeon 67
Kokonor in Tibet 292
Konvasiras tribe 279
Kophenes river, 273, 377, 385, 400
Kossæi, in employ of Darius ... 377
Kosi river ... 294, 315, 365
Kota Garhi evacuated by the Gorkhális 648
Kota, Khasiya Rája of 527: annexed, 537, 549, 565, 571: Chand residence 582, 586
Kotauli annexed by Chands ... 537
Kotavi, mystical goddess, 729-30
Koteswar, temple to Siva as, 777, 810-11, [849
Kotgári Devi, temple to ... 812
Kotivarsha, city of Bána ... 730

Page.

Kot Kangra Devi ... 797, 812
Kot-máyeswari Devi 337
Kozula-Kadaphes 494
Kozoulo-Kadphises ... 400, 404, 410
Kráchalla, inscription of 503, 516
Krakuchchhanda Buddha ... 771
Kramanda, coins of 444
Krauncha-dwípa 258
Krídávana forest 296
Krishna mountain ... 295, 297
Krishna as Vishnu, 283-4, 708-10: birth of, 712: a partial incarnation only, 713: as Náráyan, 714; the supreme, 715: glorified by Siva, 716: praised by Brahma, 718: his exploits, 718-20: interpolations regarding, 722: contest with Rudra, 728: with Bána, 729-30: with the false Vásudeva, 731-2: reconciliation with Siva, 733: name of, 789, 794: birth of Ganesha ... 803, 855
Krishna pingala, epithet of Durga ... 794
Kritiyas tribe ... 302, 409, 426
Krittikas tribe ... 302, 802
Krumu river 273
Kshatrapa dynasty of Gujrát, 410, 422, 447
Kshatriyas, tribe of, 355, 776: caste, 279: in Buddha's time ... 748
Kshemavati, a city 771
Kshetrapál at Jageswar, 762: temple, 779, 810, 825, 894, 900, 913: grants 585
Ktesias, on India 276
Kubha river 273
Kubjámraka-kshetra 339
Kuen-luen range 290
Kuhu river 294
Kuli Kalyán Chand Rája ... 539
Kulindas tribe ... 355, 359
Kulu, 355, 358, 359 (note), 362, 370, 512
Kumaon, invasion of, by Gorkhális, 609: preparations for invasion of, by British, 641-4: annexed by British, 666: administration under the British, 685-91: origin of the name, 506; earliest mention of by Musalmáns ... 520
Kumára 383, 794
Kumári, consort of Siva, 772, 781, 794, 801, [819, 889
Kumárika, name of India ... 293
Kumárila Bhatta, reformer ... 466
Kumbha-Karna, a demon ... 506
Kumpur (Ránikhet) occupied by Gorkhális, 651; taken by British, 652
Kumuda mountain ... 289, 294-7
Kunáor ... 296, 353, 359, 370, 376
Kunar river ... 295, 385, 386
Kunets tribe, 296-7, 353, 370, 379, 439

Page.

Kunti, mother of the Pándavas ... 807
Kunu country, 296, 353, 359, 362, 376
Kurmáchal ... 310, 313, 506
Kuru country ... 293, 295, 357
Kurum river 273
Kurus, see 'Uttara-kurus.'
Kuruvarnakas tribe 364
Kusa-dwípa, 288, 297: country ... 295-7
Kushang, clan of the Ye-tha ... 404
Kushtha, a medicinal plant ... 273
Kushwaktiya, Kators in Yassan and Mastúj ... 381, 426, 435
Kutila or 'bent' alphabet ... 482
Kuvera, lord of the Yakshas, 297, 376: title of Krishna, 716, 747, 784, [895
Kylindrine of Ptolemy ... 354, 359

L.

Lachhmeswar, temple at Bágeswar, 556
Lac-insect, ... 163
Lady-bird beetles, ... 116, 148
Lae-leh or chih-leh, ... 429
Lahúl, ... 457, 512
Lakes of Meru, 289, 312: of Kumaun, 317
Lakhanpur on the Rámganga, 453, 527, 536: capture of 535
Lakshmana, birth of, ... 284, 768, 813
Lakshmi, goddess, 311-2, 736, 783, 787, [798, 802, 814, 855, 905
Lakshmi Chand, Raja ... 555, 643
Lalh, title in Askot 532
Lalat Sáh, Raja of Garhwál, 575, 577: intervenes in Kumaon ... 601
Lalitá Devi, a goddess ... 798
Lalitpátan in Nepál ... 516, 607
Lál Singh, brother of Mohan Singh, 597-8, 601, 604: returns to Kumaon, 605-6: defeated by Gorkhális, 609: claims disallowed, 643-4 (note).
Lamba, the mystical goddess ... 739
Lainga purána, 286, 726, 728, 740, 771, [805
Lamghán ... 386, 431, 435, 437
Langúr of the Himálaya ... 4
Langúrgarh withstands the Nepalese, 610, [613
Lantern-flies 161
Lapwing 68
Lark, bush, sky, mountain, ... 66
Lásátas, a tribe ... 485-6, 492
Lassen on the river-hymn, 273: on Badari, 274: on route of the Aryas, 278, 284: The Baktrian Greeks, 385: coins, 389: Pálas, 489: Mahábhárata, 722; Buddhism 746, 751
Láta, a goddess ... 792, 813

Pages.

Látas, tribe, ... 279
Latham on the Rájis 366
Latu, a local deity 831
Leaf-insects 149
Leopard, two varieties, 16: snow, 17: cat, 17: clouded, 35.:
Lepidoptera, order of insects, 100, 185
Lhása founded, 466; Chinese occupation of 610
Lichchhavis of Vaisáli, opponents of Buddha, founded a Tibetan dynasty, 460, 765: of Nepál, 505, 514
Limbús of Nepál 364-5 (note).
Linga, emblem of Siva, 301-39, 722, 728: unknown in the Vedas, 706, 721, 734: great at Jageswar, 303, 779: worship in Himálaya and Southern India, 739: by Buddhists, [759, 771-2, 775, 862-5
Lizards 74-5, 78
Lob-nor lake ... 292
Localities, how noted, 3; in old works misleading 1
Locusts 149
Lohas, a tribe 279
Lohba, action near, 566, 570, 572: surrender to British... 666, 792
Lohita river 294
Lohughát, river, 310: valley in Kumaon, scene of Bánás contest, ... 730
Loka-lokas mountains 290
Lokapálas, genii, ... 291, 886
Lok-mátris, deities 884
Lola, a hill state, ... 359, 368
Long-horned beetles, ... 112-3, 140
Lopámudra, wife of Agastya, ... 806
Lugrub, Tibetan name of Nágárjuna, 409
Lúls of Káli Kumaon ... 368, 589
Lunar year in Kumaon ... 843
Luni-solar year in Kumaon ... 843
Luni-Sot, ruins near, ... 443
Lyddeker, papers on Zoology, ... 47-8
Lynx, red, 18: Tibetan ... 35, 46

M.

Machchhíndra, a Nepálese sage, ... 505
Maddyavanta, ... 294
Mádhava Áchárya, author of Sankara Vijaya, ... 767
Mádhavas, a tribe, ... 378
Madh Maheswar river, 327, 329, 770, 775, [811
Mádho, title of Krishna ... 906
Madhu, the Daitya, ... 298, 716-7, 795
Madhusúdana, title of Krishna, 709, 789, [887, 906
Mádhyamika school of Buddhism, 409, [753, 762
Madras, ... 280, 357-8, 713, 807
Mágh or Mán, festivals of the month, 857

Pages.

Magadhas, country and tribe, 274, 357, [360, 394, 486, 488, 492, 511, 718, 732.
Magádhika Kalinga ... ... 354.
Maga Kalingas, tribe ... 354, 383.
Magic practised notably in Indo-Skythia, Kábul, &c., ... 754.
Magpie 64
Mahábhadra lake 289
Mahábhárata, 272, 279-81, 283, 361, 376, 393, 707, 715: Weber on, 722-3; [725, 776, 802, 807.
Mahádeva or Siva, 382, 721; See 'Siva'.
Mahádevi, honored by Buddhists, 759, 889.
Mahákala, honored by Tantrists, 759: her Tantra, 759-60, 763, 794, 797, 819, [858
Mahánetras, tribe 296
Mahápanth ... 327, 773.
Mahárátri, goddess ... ... 822.
Mahásu, a local deity ... ... 836.
Máhátmyas, legends ... ... 287.
Mahávaipulya Sútras ... 747, 754.
Mahávira, the Jaina ... 420, 422.
Mahávrishas, tribe ... ... 274.
Mahávána or great vehicle, 409, 738, 752.
Mahendra mountains ... ... 293.
Mahendra Singh, son of Mohan Singh, takes refuge in Rámpur, 605: returns to Kumaon, 606, defeated by Gorkhális, 609: claims disallowed at Kilpuri ... 611.
Mahesvara, title of Siva 717
Mahesvári Sakti of Mahádeo, 801, 819, [890, 907.
Mahisha-Mardini, 337, 348-9: temple to ... ... 795-6, 812, 851.
Mahodaya, deity ... ... 292.
Mahoragas, a tribe of genii ... 748.
Mahryúri, captured by Chands ... 527.
Maitreya, the future Buddha ... 753.
Makar Sankránt, festivals of ... 872.
Makwánpur, action at, against Nepálese ... ... 678.
Mal or Malás, name of Tarái, 519, 537, 548.
Málas of Chhatísgarh 361
Málati, rescue of ... ... 867.
Malavas, tribe ... 357-60, 485.
Malaya mountains ... ... 293.
Malla-Náráyan, a Nága chief, 318: form of ... ... 788.
Mallard ... ... 71.
Mallas, erect a *trisúl* at Bárahát, 453, 512: inscription on, at Gopeswar, 511: trisúl of the, at Gopeswar, 513: dynasty in Nepál, 514: Doti, 529-30: of Sor and Siva ... 551
Mallika near Mála ... 311, 794
Mallik-Arjuna in Askot, 313, 794, 810, temple to Mallika ... 812, 856, 858.

	Page.
Malli tribe, ...	354
Mammalia, 4: references to works on,	44
Mánapass	783
Mánasa-Khanda, ... 287,	297-8
Mána-sarovara, 285, 289, 294, 297, 306, 308, 312, 362: grants for pilgrims to, ...	506-7
Mandákiní river, 307, 327, 347-8, 362, [770	
Mandalas or magical circles ...	755
Mandaliks of Káli Kumaon, 503,	516
Mandara, mountain ... 289, 294,	794
Mándhátagiri, mountain ...	311
Mándhátri, story of, 309, 348: avatár 707,	806
Mandi in the hills	358
Mandúr (Jodpur) a Siwálik fort ...	526
Mangalá, a goddess ... 889,	891
Marten	12
Martin	52
Marudvriha river	273
Marundai tribe ... 354, 356,	384
Maruts or wind-gods ... 705,	716
Márwár dialect of, 379: king of ...	391
Masán, a local deity	820
Massagetæ tribe	396
Mastúj, Kators of	381
Máta-murti, temple to... ...	783
Mátri-púja, 802: ritual for, 883, 886, 889, [911,	913
Mátris, goddesses, ...	785, 801
Matsya, a kingdom	361
Matsya-Purána 286, 384, 707,	726, 796
Matsyendra or Machchhíndra,	565, 898
Ma-twan-lin, Chinese historian, 400, 403, [409,	424
Maules, coins of	392
Manna-insect	263
Maunas, tribe	384
Maurya dynasty	394
Maushari, battle of, 362: (note) ...	425-6
Máyá, goddess of illusion, 298, 735,	795
May flies	180
Mayúra mountain	295
McClelland, on fishes	86
McMaster, paper on birds ...	73
Medás, a tribe	485
Medha, a goddess	884
Mangsír, festivals of the month ...	856
Mani 294,	299
Mánik Chand Raja	537
Mánikyála inscriptions, 403, 405,	408
Máníl, Katyúris retires to 535,	568
Mankoti Rajas in Gangoli, 496, 527, 537, expelled, ...	540
Manorath Joshi at Káshipur, 596: murdered by Nand Rám, ...	599
Mantis or praying insect ...	149
Mantras or charms, 860,	890
Manu, 282, *et seq.*	

	Page.
Mánurál Rajputs, 496, 535-6,	568
Mánushi Buddhas ... 753,	758
(Mara)	424
Márás, faction in Káli Kumaon, 507, 519: (Nalus case) 523, 537, 559; Bisht case, 583, 611: invasion aided by, ... 647,	657
Maráthas in the Dún, 578, 90: at Pánipat	590
Márka, priest of the Asuras ...	784
Márkandeya Purána, 286, 298, 317, 362, 376, 795, 801-2: Rishi ...	733
Marmot	23, 45
Marriage ceremonies, first visit, marriage hall, verification of the pedigrees, giving away, &c., 906-12: to the *arka* plant, 912: to a water-vessel	913
Marshall, G—on the birds of Kumaon and Garhwál, &c.	48
Meds or Mers, tribe	392
Mehtas or Mewátis of the Tarái, [521, 548, 564, 589,	645
Mekalas, tribe ... 279,	711
Mekh-Sankránt, festivals ...	869
Mena, wife of Himáchal, 304,	785
Menander the Greek ... 390, 394,	396
Merganser...	72
Merlin	50
Meru, the Indian Eden, 284, 289-93,	806
Merumandara mountain ...	289
Merutunga, author of Therávali, 423,	491
Metallic beetles 109,	132
Mewátis or Mehtas of the Tarái, 521, 548, [564,	
Mhasoba, a local deity ...	819
Mihirakula of Kashmír ...	434
Milam in Juhár ... 369,	455
Milinda, king of Ságal, 394,	409
Millipedes	265
Mimic beetles ... 106,	123
Minivet	57
Mingeswar, temple to Siva as, ...	811
Min-Sankránt, festivals of ...	869
Mites	90
Mithridates of Parthia, 389,	396-7
Mitra, Rajendra Lala, on the Yavanas, 395: on the Pálas, ...	420
Mlechchhas, 276, 279-80, 282, 303, 385, [362, 378, 419,	424
Mohan pass into the Dún ...	525
Mohan Singh, usurper, 577, 594: his family, 606: murders Parmanand Bisht and Rani Svingasmanjari, 595: murders Jaikishan Joshi and Raja Díp Chand, 597: usurps the gaddi, 598: murder of Lakshmipati Joshi, 601: retires to Rámpur, 602: restored, 604: death, 604, 644 (note.)	

	Page.
Mole, 8, 44: rat, 23: moths ...	185
Mollusca	87
Mongols in the Himálaya ...	512
Monkeys	4, 44
Months, names of, in Kumaon ...	844
Moorcroft's Travels ...	292, 645
Moradabad founded	562
Mountains of Jambu-dwípa ...	293
Mouse, tree, hill, field, 24, 44-45: hare	26
Mriga Brahmans of Śaka-dwípa, 354,	383
Mrityunjaya on Vikramáditya, 412, deity ... 449, 779, 782, 913,	919
Mudras or mystical signs, 755, 897: see 'Kar-nyás,' 'Ang-nyás.'	
Mughals in the Himálaya ...	512
Muglis of Hanza and Nagar ...	512
Muhuras of Ryúni, 507 (note): of Bujún and Thal	530
Muir, J., Sanskrit texts, 275, 280, 705, 711: on Nara, 715, on Mahábhárata ... 722,	732
Mujavats, tribe	274
Mukhar Bind temple in Nepál 770,	775
Mukúta-Krishna, mountain ...	295
Múlá-nakshatra, ceremonies for the,	914
Mulberry cultivation in the hills ...	201
Müller, Max, on Vaidik dates ...	271
Multan, battle near	424-5
Mundan-debta, form of Nirriti ...	798
Mungir inscription of the Pálas, 481,	486
Mungoose	20
Muniya	65
Munja Keshavat, title of Vishnu ...	789
Múra, fly of Kumaon	259
Mura, the asura	718
Murlimanohar, title of Vishnu, 788,	813, [14
Múrmis, tribe of	765
Musalmán, historians in Kumaon, 450, 520-6, 537, 542-6, 557, 562, 581: on Kábul valley, 431: colonies, 565: in Kumaon ...	842
Musk rat, 8: musk deer ...	31, 48
Muthra, 298, 354, 361, 394, 405,	712
Muztágh range	290
Myna	64
Myriapoda	264-6
Myrmeleons	181
Mysore, origin of name ...	795

N.

	Page.
Nábhi, son of Agnidhra ...	293
Nacra Somtou of D'Anville, 382,	458
Nágáchal	340
Nága-dwípa, ...	293
Nága monks, attack Almora	602
Nágantaka, title of Garura ...	805
Nagarahára in the Kábul valley ...	431
Nágárjuna, employs Nága artists, 376: with Milinda, 394, 409: in Káshmir, 407, 738: Buddhist writings of, 752, 760: temple of,	810
Nágárjun temple ... 314,	569
Nagarkot, records, 433, 438: mercenaries, ... 591,	594
Nágas, 270, 281, 295, 297, 299, 318, 352, 364: summary, 373, 382, 748, 752, 756, 805: worship in the hills	835
Nága-saila	295
Nága-sena, same as Nágárjuna ...	409
Nagdeo Padamgír, ... 848,	856
Nagina attacked by Kumaonis ...	568
Nágnáth, the seer of Champáwat, 533; temple in Chárál, 572, 585, 591,	[598, 809
Nág-panchami, festival of, 848,	851
Nágrája in the Himalaya, 297, 701-2,	723, [783, 810
Nagrásuni, a goddess ...	801
Nág siddh hill, in Dún, 338,	526
Náhan, held by Gorkhális, 635: occupied by British, 641,	665
Nahapana of Gujrát, 392,	410
Nah-Thi, Tsanpo of Tibet ...	765
Naini, a goddess, ... 798,	812
Nainí-Tál	316
Naithana fort in Páli, defeat of Harak Deb near, 604: surrender to British	666
Najíb Khán Rohilla in the Dún, 575: at Pánipat	590
Nakula, the Pándava	281
Nala and Damayanti	776
Nálanda temple	488
Naleswar, title of Siva 776,	811
Nalini river	292
Nalu Kathávat, story of 522,	560
Nambúri Brahmans in Travankor, 768,	[775
Nam-karana, ritual for, ...	890
Nana, a Marátha title ...	404
Nánakmatha, in the Tarái, 549: with the Patháns	559
Nanda, mountain, 297: goddess in the Himálaya, legend of, 297, 313, 702: temples to, in Almora, 566: Krúr, 576, 792, 812-13, 851,	889
Nanda, foster father of Krishna ...	712
Nandákini river	792
Nand-ashtami, festival on ...	851
Nandi, the bull of Siva, 737, 799,	862
Nándi-Srádddha, ritual for ...	885
Nandprayág ... 331,	783
Nandrám, governor of Káshipur, 596: intrigues with Mohan Singh, 597: becomes a feudatory of Oudh, 598: aids Mohan Singh ...	604

Page.

Nau Durga, nine Durgas, 812, 848
Nárada, Muni, 283, 338: puráṇa, 286: avatár, 708, 715, 722, 776, 784, 868
Naraka, the Asura city of Ásám, 718, 730
Nar-Sinha legend of, 467, 493, 784: temples, 813-14: grants 582: avatár 707, 786, 887
Nára-Sinhi, Sakti of Vishnu ... 801
Náráyana, Bráhma form of, 707-8, 789; Krishna, form of, 714, 717: struck by Siva's trident, 728: occurs in Buddhist Sútras, 747, 784, 788: temples, 814, 869, 906: grants 591
Náráyan Chand retires to Doti, his descendants 583
Náráyan Dyal, form of Vishnu ... 788
Narbhupála Sáh, Rajá of Gorkha... 607
Nári-khorsum in Tibet, 362, 369, 376, 458
Narmadeswar, title of Siva, 782, 869
Nar-Náráyan, 283, 307, 332, 707, 710, [714, 728, 776, 784
Nar Sáhi, Gorkháli Governor of Kumaon 613
Násik inscriptions 410
Naukuchiya Tál, lake 317
Naulakhiya Mal or Tarái, 540, 561, 572
Naulo, a local deity 831
Nawáda, old capital of the Dún 526, 576
Nepál annals, 364, 373, 374, 378: on Vikrama, 423: on Sankara, 464: Kiráti dynasty, 510: Thákuri revolt, 511: *trisúl* of Pasúpati, 514: on Kráchalla, 516: history of the Gorkháli state, 607-9: Chinese invasion of Nepál, 610: local politics 613-614, 618, 867
Nepál war, causes of the, 629: peace with Nepál, 667: boundary questions, 668: treaty concluded ...677-9
Neuroptera order of insects 100, 180
Nevill, on Indian molluscа ... 90
Newárs of Nepál 371
Nicolls, J., Col., takes command of Kumaon forces ... 659, 678
Nicholson, on snakes 78
Nidra-kálarupini born of Yasoda ... 794
Night-jar 53
Nila mountain ... 289, 295
Nílagriva, title of Siva... 721, 781
Nílakas, tribe 296
Náleswar, temple to Siva as, ... 810
Nílkantha, title of Siva ... 781
Nirmochana, the Asura city ... 718
Nirriti, goddess of evil, 790, 794, 797, 848, [894, 914
Nirvána, ... 752-3, 755
Nirvira river 294
Nishádas, a race of aborigines, 282, 300, [372

Page.

Nishádha mountains, 289, 294, 385: a tribe, 300, 358, 361, 719
Nitya-kárm, ritual for ... 874
Noákot, Rájas of, in Nepál ... 608
Nono, a title in Spiti 404
Nut-hatch, 56: nut-cracker ...64, 72

O.

Obi river 292
Ochterlony, General,—operations on the Satlaj, 641, 679: prepares to invade Nepál, 676: peace of Makwánpur concluded by him ... 678
Odras, a tribe 282
Ogha, the Rákshasa 718
Oil-beetles ... 111, 136
Om, mystic syllable ... 860, 894
Onkárnáth on the Nerbudda ... 858
Ooemo Kadaphes, ... 404
Ooerki or Huvishka ... 403-4, 737
Ordeal, trial by, in Kumaon ... 627
Oriole 60
Ornithology 48
Orthoptera order of insects 100, 149
Otter 13, 44
Ottorokorræ, 279: see 'Uttara kurus'
Ou-chang or Swát 429-30
Oudh Nawáb seizes Sarbna, 585; war with Kumaon 589
Ounce 17
Ousuns of Wu-sun 400
Ouzel 58-9
Owl, 51-2: Owlet 52, 72
Oxus river, 289, 292, 401, 428

P.

Pábana or Baleswar, 310, 313
Pabaneswar, temple to Siva, as, 810: grants to 604
Pacheswar, title of Siva, 782, 810
Padam Singh 611
Padmá a goddess ... 884, 889
Padmanábha, deity 906
Padmapáni, avalokiteswara 505, 808, 890
Padma-Puráṇa, 286, 299, 704, 726, 795, [798, 855
Padyár Rajpúts of Chaugarkha, 496, 527, [554
Pahlavas, tribe, ... 280, 282, 423
Paisáchaka mountains, 294, 297
Paisáchi, a dialect spoken by Pisáchas ... ... (299) 373, 748
Pákasásáni conquers the Dasyus ... 279
Pála Rájas of Bengal, 481: in Kumaon 483, 486-92
Pálibothra, 353, 378, 387, 391, 394
Páli Katyúri Rájas, 454, 494-6, 536; capture of ... 535, 539
Pámir range ... 289, 429

Page.

Painkhanda in Garhwál ... 786
Pancha-chúli mountains, 294, 313
Panchajana, a marine demon ... 719
Pancha-krama, Tantrik work ... 766
Panchakúta mountains 294, 313
Panchála, the Duáb, 354, 357, 360, 394
Pandas of Jageswar ... 303, 780
Pándavas, 279, 281, 283, 355, 373, 443, [770, 807
Pándes employed by the Chands, 508, 550: of Bairti near Dwára, 585: of Patiya 598
Pándukeswar, 282, 332, 357: copper-plate grants from, 471, 785, 811
Pándura mountain ... 295, 297
Pánduwála, ruins near 443
Pándya, a prince of the Dakhin ... 719
Pandya country ... 362, 373
Pánini ... 274, 394
Pánipat, battle of, a Kumaoni contingent there 590
Panjtar inscription 403
Pannágas, a tribe 297
Pannága-kshana, title of Garura ... 805
Panther, variety of leopard ... 16
Pants of Gangoli ... 540, 551, 557
Panwárs in Garhwál 446
Parachas of Kábul 434
Páradas tribe 280, 282
Parákram Sáh of Garhwál, 577, 603-5, [615
Parásara Rishi, temple to ... 805
Párasikas 295, 357-8, 361
Parasuráma, 312, 378: avatár, 707, 709, 722: contest with Ráma, 724, 776, 803
Parbatiyas, a people ... 792
Párijáta mountain, 295: tree, 296, 320, [719
Parikshit, Rája of Hastinápur ... 281
Páripatra mountains, 293, 357
Parkhu Pant of Gangoli, exploit of, 551, 554
Paropanisadæ mountains, 362, 372, 385, [387-8, 396
Parroquet 54
Partáb Singh, claim to Tarái disallowed 644
Partáp Chand Rája 537
Parthian revolt, 387: Arsakes, 388: Mithridates, 389: coinage, colonies, 280 392, 397, 410, 439
Partridge, snow, *chukor*, black, grey, *kyah*, Hodgson's hill ...68, 73
Parushaka country 295
Parushni river 273
Párvati, birth of, 303-4: known also as Umá, Gauri, Durga, Káliká, Bhadra: her worship, 718, 722, 739, [781, 785, 788, 791-2, 802, 884, 889, 891
Pásupatas, followers of Pasupati, 773, 860 [868-9

Page.

Pasupateswar, title of Siva ... 770
Pasupati, form of Siva, 407: acknowledged by Buddhists, 465: weapon, 714, 773, 734, 738, 761, 763: in Nepál 770-2: in Kedár, 773: priests of ... 808, 927
Patála, 303-4, 319 (note), 719, 794: list of 925
Pátála-Bhubaneswara, 310, 318, 782, [810
Pátan in Nepál 515
Patanjali, philosopher, 394, 742, 754
Páthan inscription 421
Pattis tribe 353, 358, 362, 373
Pathya-Svásti 273
Paundrakas tribe, 282: Vásudevá of the 731, 779
Pávani river ... 292
Peacock 67
Pelican 71, 72
Peunbo in Tibet 766
Periplus of the Erythræn sea 391-2
Personified energy, worship of ... 736
Peters, *on scorpions* 96
Phágun, festivals of the month ... 858
Phaldakot held by Káthi Rajpúts, 496, 527: annexed 536
Phálguna or Arjuna ... 315, 715
Phartiyál faction in Káli Kumaon, 507-8, 512, 559, 583, 591, 593, Sib Deo murdered, 594, 604: in Juhár, 611: invasion aided by, 647: defeat at Khilpati, attributed to 657
Phatepat Sáh of Garhwál 573-5
Phaunás, a tribe 399
Pheasant, *monál chír* koklás, *kalij* horned 67, 72
Phrahates of Parthia ... 397, 410
Phruri tribe ... 353, 399
Phúl-Sankránt 872
Piculet 55
Pig, wild 28
Pigeon, green, wood, stock, rock ... 67
Pilgrimages to Kedár and Badari ... 704
Pilibhít, Hearsey's force starts from, for operations in the Káli valley 655
Pill-beetles 105
Pinákisa or Pináth, 315, 782, 848, [856: grants to, 566, 569, 591
Pindar river ... 297, 313, 335
Pindas for obsequial observances, 853, 921
Pinjara mountains 294
Pipit 63
Pisces 82
Pitámaha 715-16, 747, 771
Pittra, the Asura 718
Plaksha-dwípa 288
Planet-worship, ritual for ... 893
Pliny ... 352, 384, 396

Page.

Plover 68: stone 69
Pochard 71
Poh-ho, kingdom of ... 429, 431, 438
Poisoning pools for fish ... 82
Po-he-lo or Iskárdo .. 431, 435
Ponies, Tibetan and Bhábar ... 43
Pon religion in Tibet: See 'Bon.'
Porcupine ... 25, 44
Porpoise of the Ganges ... 22
Porus an Indian king writes to Augustus, 392; or Phúr of Dehli, 450
Potato-beetle 116
Prabhása (Somnáth) 719
Pradhaman Sáh, of Garhwál and Kumaon, 577, 602-5: makes terms with Gorkhális, 610-11, 615: death 617
Pradípt Sáh, Rajá of Garhwál, 574, 588, [592
Pradyumna ... 716, 729, 888
Prágjyotisha in Asám... 718, 730
Prahlád, the Vaishnava, 299, 729, 784, [786-7
Prajápati, 280, 320, 706-7, 726, 896, 919
Prajna-páramita (perfection in wisdom) of Nágárjuna... 752, 755
Prakriti or nature 735, 740, 742, 768
Pralambha, slain by Krishna ... 718
Pránáyám in Kumaon, 859, 876
Prasanga school of Tibet ... 754
Prasthalas tribe 280
Pratisthana on the Godavery, 411, 449: a name of Jhúsi ... 504
Pratyadhidevatás ... 886, 898
Pratyeka Buddhas 752
Prayág, holy figtree, at 558, 560
Prinsep, J.—tables 843
Prishnigarbha, title of Vishnu ... 789
Pritam Sáh of Garhwál, 577, 615: claim to the Dún 682
Pritchard on the Rájis ... 366
Prithinárayan Sáh of Nepál ... 608
Prithipat Sáh, Rája of Doti, 647: invades Doti and is killed ... 656-7
Prithiráj, defeat of and capture of Siwáliks, ... 524
Prithwi 300
Ptolemy, geographer, 279, 295, 352, 355, 384: king 352
Pulindas, tribe of 795
Pundras tribe, 357, 360, 731-2, 779
Punyá, a goddess 891
Punyamukha, a goddess ... 891
Puránas, eighteen in number, of different dates, 286: their geography and ethnography, 288, 294, 297, [357
Puri in Orissa, math at ... 768
Purnimá or full moon, festivals of the, 848 at seq.
Purnoda lake, ... 294

Page.

Purnagiri temple in Tallades, 797, 810, 812, 867: grants to, 572, 585, 591
Purusha, supreme spirit, avatár, 708-9, [714, 718, 735, 740, 742
Purushapura or Peshawar 431, 437
Purushottama, title of Krishna, 709, 716: false, 732, 787: meaning of, 789
Purushottama of Gangoli, 551, 554
Purva-dwípa, eastern island ... 294
Pús, festivals of the month ... 857
Púshan, deity ... 299, 927
Pushkara-dwípa, 288: mountain ... 295
Pushkar-Nág ... 338, 348, 850
Pushkar peak 348
Pushm or shawl-wool 41
Pushpadanta, story of ... 284
Pushpaka mountain ... 295, 297
Pushti, a goddess ... 736, 794, 884
Pútana, the child-slayer 711, 719, 867
Putresvari, a goddess ... 801, 812
Pyúthána in Nepál, house of the Mankotis ... 496, 609
Python 76

Q.

Quail, bush, corn, rain, button, bustard 68
Quintus Curtius 396

R.

Rádhá, the mistress of Krishna, 736, 798
Raghunáth, temple in Almora, 789, 813: grant to 604
Raheb or Rámgangá river ... 521
Rahu, eclipse ... 886, 893
Rail 70
Rainka Rájas of Doti, 529, 534, 541, 544
Ráj-Rajái, title of Chands ... 507
Raja Sekara, writer 409
Rája-Súya sacrifice 711
Rájávali 411
Rajbár, a title of Katyúris, 520, 536: in Askot ... 531, 553
Ráj-búnga in Champáwat, 507, 529
Raj-chelis or palace slaves ... 569
Rájis, 270: Rájya-Kirátas,
Rájpur canal in the Dún ... 526
Ráj-Rájeswari Devi ... 346, 448, 815-16
Rájya, a state ... 365, 368, 507
Rájya-Kirátas, tribe, 270: their representatives 359, 362: in Kumaon, 465-8
Rákhas-Tál 289, 311-12
Rakshábandan observances, 850, 886
Raksha-Bhágavati, a Buddhist work, 752
Rákshasas, tribe, 277, 280, 290, 296-7, [299, 376, 506, 716, 805, 868
Raktavíja, the Daitya ... 795

Page.

Ráma, avatár as, 708: as Vishnu, 703, 716, 720: notices of, in Mahábhárata, 732: contest with Parasuràma, 724: reconciliation with Siva, 733: at Kamaleswar, 778: at Rámeswar, 303, 782, 858: temples to ... 789, 814, 869
Ráma Chandra, temple to ... 813
Rámapádak, form of Vishnu, 789, 813, [848
Rámas, tribe ... 357, 361
Ráma-sera 311
Rámáyana, 272, 278, 707, 724-5, 802, 806
Rámeswar temple in Bel, grant to, 569, [782, 810, 858
Rámganga (western), 313, 391, 521, 547, [559
Rámgár, Khasiya Rája of ... 527
Rámjaní, form of Vishnu ... 789
Rammohan Roy on the date of Sankara Achárya 464
Rámnagar on the Kosi 543
Rámnaumi festival, ... 848
Rám Rái, Guru, of Dehra, 840, 848
Ramsay in Kumaon 688
Ramyaka country ... 289, 293
Ran Bahádur Sáh of Nepál, 608, 613: restored killed ... 618
Ranchúla in Katyúr, 866: action near 580
Ránikhet (see Kumpur).
Ranjor Singh Thápa in Náhan, 935, 641, [665
Rao inscriptions, 404, 410: titles in use 404
Ráotelas, cadets of the Chand house, 542, [553, 606
Raper on the Gorkhális ... 620
Rasa river 273
Rásálu, deified hero ... 352, 438
Rat, mole, brown, 23; tree, house, bambu, 24, 44-5: snake ... 76
Ratanchand Raja ... 529, 829
Ratgallis officials ... 550, 560
Rathabáhini or Rámganga ... 313
Rathors of Kanauj 491
Ratneswar, temple to Siva, as ... 809
Ratu, story of, head man of Katyúr 554
Rávana, the Rákshasa, 284, 299, 708, 763
Raven 64
Ravi river ... 273, 294
Rawáin in Tihri 680-1
Rawal, chief priest of Kedár and Badrináth ... 472, 775, 787
Ráwan-hrad ... 289, 312
Ráwats of Kumaon, 494, 503, 507, 510, 516, 553: see also 'Rajyakirátas: of Mílam 457
Redbreast 58

Page.

Redshanks 70
Redstart 60
Regions of distribution of local fauna, 2
Religion in the Himálaya ... 699
Reptiles ... 73, 78
Rig-Veda ... 272, 274, 276
Rikheswar, temple to Siva, as 810, 851
Rikhikes, in the Dún ... 284, 338, 872
Rikh-tarpan, worship of the Rishis... 850
Riksha mountains 293
Rinmochana 311
Rishabha mountain 294
Rishikas, tribe 279
Rishis, constellation of the, 299, 302, 320
Ritter on the Rájis 366
River-hymn in the Vedas, 272: rivers of Meru, 292, 878: of the Himavat ... 294, 312
Robin, 60: water 61
Rock temples, forms of Siva, in, 737, 762
Rohillas employed by Debi Chand, 581: invasion of Kumaon, 586-7: disturbances, 611: aid in invasion of Kumaon, 645, 652: retires to Benares 614
Roller 59
Romakas, tribe ... 296, 437
Romanas, tribe 358
Roots of the Hindu-Kush 404, 435-37
Rose-beetles 109, 130
Rose-finch 66
Rot, a species of tenure ... 522, 529
Ruby-throat 61
Ruc, eggs of the, 402 (?) legend ... 804
Ruchaka, country 294
Rudra, 299, 322: in the Vedas, 705, 734: title of Krishna, 716: inferior to Krishna, 717: the older and the later, 720: Siva as, 721, 781: bow of, 725: at Daksha's sacrifice, 725, 734: contest with Krishna, 728: considered one with Siva, who is reconciled with Vishnu, 733: Pasupati form of, 773: Himálaya, 775; consort of, 790: his sister, Ambika, 793: festival, 854-5: in ritual, 890 *et seq.*
Rudra Chand Rája, 542, ordeal of battle, obtains Tarái, 546, 643
Rudradatta Pant, Brahman ... 499, 531
Rudranáth 330, 770, 775-6, 811, 869
Rudras, Genii 297, 322
Rudrbir Sáh, Gorkháli Governor of Kumaon ... 614, 619, 674
Rudrpryág ... 334, 347
Rudrpur in the Tarái, 549, 581, 586, 589, 596: falls to Oudh, 599: occupied by Kumaonis, 609: Shah-Wali, farmer 645

Page.

Ruff 69
Rukmini and Krishna ... 712, 719
Rum-gallis of Káfirstán- ... 437
Rûniya, a local deity 831
Rupeswar, temple to Siva, as, 810, 851
Russell, on snakes 78
Russell's viper 77
Russia, Tibetan name of ... 288
Rutherford, Dr., attached to Kumaon force ... 642, 645
Ryûni, occupied by British, 653: temple 828

S.

Sábari dialect ... 360, 373
Sábir Sháh, the pseudo prince in Kumaon 581
Sachipati, a title of Indra 748, 884
Sacrifices and oblations ... 866
Sadánira river 281
Sadásiu form of Siva ... 770, 773, 864
Sádhyas, sprung from Krishna ... 716
Sagara, sage ... 280, 309
Sagaraukæ of Ptolemy ... 397, 399
Sáh or Sháh, title of Vásudeva 405, 426: in Kálaka legend, 406, 419, 426, 738: on Allahabad pillar, 406, 426
Sahadeva, the Pándava ... 281
Sáh Rájas of Lohárn, 378, 438: of Ujain 384, 419
Sahasráksha, the thousand-eyed ... 778
Sahasránika of Kausambhi ... 284
Sáhus of Dwára Hát ... 550, 560, 570
Sahya mountains 293
Saim, a local deity ... 825, 830
Saindhavas tribe 357, 358, 360
Saineya, charioteer of Krishna ... 279
Saiva, Purána, 286: worship in the Himálaya, 701, 704: absorbed Buddhism, 723: contest with Vaishnavas, 724: opposed to sacerdotalism, 727: contest at Benares, 731: reconciliation with Vaishnavas, 733: union with Buddhism, 738, 759, 772: shrines in Kumaon, 770, 781: list ... 809
Sakadatta 411, 449
Sakáditya of Kumaon 411
Sáka-dwípa 288, 297, 354, 383
Saka era ... 406, 410-25
Sákala or Sangala 361, 394, 409, 4 8
Sakarauli tribes ... 396-7, 399
Sákári dialect, 360, 373: title ... 412
Sakas, tribe of, 270, 279-80, 282, 297, 352, 358, 364: summary, 372, 378, 382-403: era, 410-26, 846
Sákasena at Kanheri 410
Sakasene in Armenia 426
Sakastene ... 397, 448

Page.

Sáketa or Oudh, ... 394
Sakæa, festival of 426
Sakra or Vásava occurs in Buddhist Sútras 747-8
Sakti, worship in the Himálaya, 701-2: popular, 723-4: origin of, 735-8, 758-60: idea borrowed by Buddhists, 761-2: allied to the Bonpo deities, 764: sanctioned by Sankara, 770: forms commonly worshipped, 790-802, 884: teaching of priests, 865: son of Vasishtha, 805
Sakuni, slain ... 711, 719
Sákya Muni: See 'Buddha' ...
Sáliyahana, 352, 378, 410-1, 421, 438, [448-9, 530-1, 779
Sálmali-dwípa ... 288, 296
Sálwas of Sakala, tribe... 357, 359-60, 372
Salya, king of the Madras, 713, 719
Samádhi or trance 755
Sáma-Veda, quoted 736
Sambhar deer 29
Sambhu ('progenitor') title of Siva, 299, [716-7, 808
Sampaha 452, 457
Samvaradya Tantra, Buddhist work, 759
Sandhya or office for domestic worship 874
Sandpiper 69
Sangal Nág, temple to ... 835
Sangha or Buddhist assembly ... 744
Sanhitas or collections... 271, 287
Sani, the god Saturn ... 803, 886, 893
Sanjaya, the charioteer... 732, 789, 815
Sankara, a synonym of Siva, 296, 299, [706, 747
Sankara Achárya, apostle of the hills, his age, 463: in Nepál. 465, 735: in Kumaon, 466, 735: appears to Katyúri Rája, 468: his writings, 767: life and work, 768-70, 779-80 [782-3, 790
Sanke Somtou of D'Anville, 382, 458
Sankha-Kúta, mountain ... 295
Sánkhya system of philosophy, 740-1, 754
Sankrant, passage of sun from one constellation to another ... 869
Sanyásini, a goddess 801
Sansára or suffering, ... 755
Santaura, local deity 801
Sannyásis in Báleswar... ... 542
Saptrikhi, constellation of the ... 302
Sáran, encroachments of the Nepálese in 631-4
Saranca tribe ... 396-7, 399
Sárnga, title of Krishna ... 709
Sárasvati river, 272-3, 278, 294: goddess, 274, 736, 759, 768, 857, 901, 950
Sarayu or Sarju river ... 294, 308, 310, [355

Page.

Sarbeswar, title of Siva, 781, 811, 927
Sarbna in the Tarái, 549; seized, 585, 587, 589: with Oudh ... 599
Sarirá or relics of Buddha ... 749
Sár Náth, Pála inscription ... 489
Satadru river, 273, 293-4, 308, 312, 359
Satapatta Bráhmana, 707, 771, 773, 781
Satarúdriya hymn ... 720, 773
Satasringa, mountain 297
Sátávahana ... 409, 421
Sati, the wife of Siva ... 302-4, 726
Satlaj river ... 272-3, 293, 359
Satrapies of Baktria 386
Satrughna, 298: birth of ... 708
Sát Tál lakes 317
Sáttvata, form of Krishna ... 789
Satya Náráyan, form of Vishnu, 788, 815
Satyanáth, a sage ... 534, 537, 815
Satyavrata, sage 279
Saumya, portion of Bhárata ... 293
Saun, festivals during 849
Saundikas, tribe 279
Sauviras, tribe ... 357-60
Savaras, tribe 279, 364, 795, 800, 867
Sávitri, the personified *gáyatri* 299, 736, [849, 875, 901
Sáwan or Saun, festivals during ... 849
Saw flies 245
Sayánas or elders appointed, 508, 537, 568
Sayyid Ali Murtaza date of ... 505
Scarabæus beetle 106
Scavenger beetles 105
Schlegel on the Mahábhárata ... 722
Scorpion-flies 180
Scorpions ... 90, 92, 96
Seleukos Nikator 387
Senas of Bengal ... 491-2, 511
Sericulture, 200: introduced from China through Tibet ... 509
Serika or China 279
Seshnág, the Nága, 298-9, 315, 319, 375: temple to 835
Setæ of the Silver country 354-5, 358
Settlement of Sákti Gosáin ... 555
Severtzoff, mammals of Turkistan ... 47
Sexton-beetles, ... 106
Sháhjahán-namah in Kumaon ... 562
Shah Wali, farmer of Rudrpur ... 645
Sháli or Suwál river 315
Shama 60
Shashthi Mahotsava, ritual for ... 888
Shawl-wool 41
Sheep, blue, 17, 34, 45, 46, 47: domestic, 38: Tibetan... ... 39
Sheldrake 71
Shells, terrestrial and fluviatile ... 87
Sheshachal or Abu mountain ... 306
Shield-beetles ... 106, 122
Shikra 50
Shinduh, India of the Chinese 493, 409

Page.

Shins of the Upper Indus ... 435-6
Shiuráj Singh, Rája of Káshipur ... 606
Shiurátri festival 858
Shor or Sor: See 'Sor.'
Shoveller 71
Shrike, 56: tit 63
Shrews ... 8, 44, 47
Siam, era in 418
Sib Deo Joshi in the Tarái, 585-6: as principal minister, 587-93: death 594
Sibia 59
Sib Lal, Governor of the Tarái 599, 600
Sib Singh Raotela, set up as Rája of Kumaon 605
Siddhas, genii, 290, 296-7, 300, 319, 358, [813, 815
Siddhásrama or Badari ... 284
Siddha Senani, epithet of Durga ... 794
Siddhi or state of perfection 755, 759
Sigal, city of the Sakas 397, 448
Sikhi mountains ... 294-5
Si-Khiang, people of Tibet, 430, 459, 486
Sikhs, some amongst Bhuksas, 372: Gurus of Dehra shrine, 573; in the Dún, 574, 578-80: Mahants, 619: raids, 620: temples of ... 840
Siláditya of Kanauj 424
Sileswar, a title of Siva, 776, 811
Silk moths 188
Silk worms 200
Sindhu river, 272, 292, 294, 359, 429
Sindhu Sauvirás, a tribe ... 280
Sinha, title of Garhwáli Rájas 507 (note)
Sintu river 429
Sira belonged to Doti, 496, 527, 529, 537, 541: capture of, 550-2, Rájas of, 553: prison in 597
Sirikol 439
Sirkur 55
Sirmor Rája intervenes in Dehra Dún, 578
Siromani Das, governor of Káshipur, 590, [596
Siskin 66
Sisupála, lord of Chhedi, 711-12, 719, [732
Sita, ordeal of, 708, 761: temple of, 802, [813-4
Sita river, 292, 429: in Kumaon ... 315
Sitaban, in Kota Dún 316
Sítala, a goddess ... 763, 858
Sítala Devi, temple, 800: grants, 585, 598
Sitánta mountain ... 294 296
Siteswar, title of Siva ... 782, 849, 856, [869
Sitoda lake 294-5
Sitoli ridge near Háwalbágh, 604: occupied by British, 653: base against Almora 662

Page.

Siva (the 'auspicious') unknown in the Vedas, 706: first occurs in the Bráhmanas, 706, 747: as Mahádeva is superior to Krishna, 710: inferior to Krishna, 717: the great god, 721: bow of, 724: at Daksha's sacrifice, 725-8: aids Bána, 719: contest in Káshi, 731: reconciliation with Vishnu, 733: the modern is a pre-Bráhmanical deity, 733-5: Androgynous form of, 736-8: linga emblem: see 'Linga:' sanctioned by Sankara, 770: see 'Pasupati,' 'Rudra:' names of, 780, 861: temples to, 781-3: father of Kárttikeya, 802: of Ganesha, 803: great festivals, 846, 860: great temples in India ... 858
Siva-trimukhi in coins, 737-8: temples 781
Siwálik hills, 450: use of the term by Musalmán historians ... 524-6, 544
Siyáhi Devi, mountain, 315: occupied by British ... 652, 665
Siyáh-Poshes of Káful ... 434-5, 437
Siyálas tribe. 295
Skambha, the supporter ... 707
Skanda, or Kárttikeya, 302, 469, 729, 738: temples of ... 802, 888
Skanda-Purána, 286-7, 297: contains nine Khandas ... 304, 726
Sky lark 66
Skythians, 396, *et seq.*, 399, 406, 426: Gujrát, 410: of Chitrál, 435: of Garhwál, 445, 507 (note): of Sor, 529: of Doti; list of ... 530-1
Slavery in Garhwál ... 615, 618, 620
Slesh-mántak forest in Nepál ... 772, 870
Smriti period 272
Snails 88
Snakes, harmless and venomous ...75, 78
Snake-bird 72
Snipe, jack, solitary, painted, common 69, 72
Snow-leopard, 17: cock, 67: partridge 67
Sogdiana ... 386, 396-7, 400, 436
Sokpas of Milam 369, 457
Solar year 843, 869
Soma, 297, 300,: title of Krishna, 716: [791, 805, 886, 919
Sombansis of Kumaon, 497, 503: of Oudh, 504: of Jhúsi, 505: Nepál 772
Som Chand Rája ... 498, 500, 504
Someswar temple, 315, 388, 810: grants to 566
Somnáth, (Prabhása), 719: school of magic 754, 858
Somvati amáwas 850
Sona river 372
Sonitpura, city of Bánas ... 730
Sor belonged to Doti, 496, 527, 529: attacked, 530, 537: annexed, 541: Rájas of ... 553, 568, 570
Spanish-fly 111
Sparrow 65
Sparrow-hawk 50
Sphinx-moths 188, 214
Spiders 90
Spiti 353, 404
Spotted deer 29
Springing-beetles ... .110, 133
Squirrel, striped, flying ... 22, 44
Sráddha observances, 850, 853; see further 'funeral ceremonies.'
Sramanas, Buddhist ascetics ... 749
Srí produced from the ocean, 320, 717, 857
Srí Chand, Gujráthi, story of ...534, 539, [567
Sridhara, title of Vishnu ...887, 906
Sri Harsha, his era, 414, 424: king 488
Sri-Jantra, an amulet altar ... 756
Srikantha sectarial mark ... 728
Sri-Kshetra 344
Srinagar, Garhwál, founded, 446, 526: temples near, 346, 453: Rája of, 549, 562, 564: peace of, 568, 572: captured 577, 580, 603: threatened by Rohillas, 587: occupied by British ... 667
Srínátheswar temple in Giwár ... 583
Sringeri math, in Madras, 463: in Mysore 768, 862
Sringin sauge 289, 295
Srivatsa sectarial mark ... 728
Srughna ... 352, 359, 451
Stag-beetles 107, 124
Stare 65
Starling 64
Stevenson on Sivaism 734
Stewart on the Bhuksas, 371 (note)
Stháviras, Buddhist clergy, 749, 751: as opposed to Jangamas ... 863
Stick-insects 149
Stilt 70
Stint 69
Stoat 12
Stoliczka, on birds, 73: on snakes, 78: on spiders 96
Stork 70
Strabo, the geographer, 391, 396, 426
Strachey, H., Lieutenant, on the Rájis 366
Strachey, Sir J., Skanda Purána, 271: Rájis, 367: history ... 499
Strepsiptera 100
Stri-rájya or Amazonian kingdom ... 458

	Page.
Subaksha mountain ...	... 294-7
Subhávati, title of Varuna	... 292
Sudhisravas, title of Vishnu	... 789
Sudarshana or discus, weapon of Vishnu ...	299, 729
Sudarshan Sáh of Garhwál,	616, 680, [823, 833
Sugríva, form of Garura	... 296
Súi, dynasty in Káli Kumaon, 494, 507, 508, 510 : town	... 730
Sukeswar, temple to Siva, as	... 810
Sukra's curse, 707, 797 : Venus,	886, 893
Suktimat mountain ...	... 293
Sukúta, mountain ...	... 297
Sulaiman Shikoh, extradition and murder of ...	... 563-4
Sumanjasa mountain ...	... 293
Sumanta mountain ...	... 294
Sumegha mountain ...	... 297
Sumitrá, wife of Dasaratha	... 708
Sunábha, son of Garuda	... 297
Sunága mountain ...	... 295
Sunáman, brother of Kansa,	718-19
Sundar Prayág ...	338, 350
Sung-yun, Chinese traveller,	429-30
Sunwars, (tribe) of ...	... 764
Supárswa mountain	289, 295
Surabhi, mother of kine	... 299
Surádevi, goddess of wine	304, 795
Surajbansis in Nepál ...	... 514
Suras, tribe	...304, 320, 357, 360
Surasa, mother of the serpents	... 299
Surasenas, tribe, 354, 358, 361,	394, 719
Suráshtra or Gujrát	357, 360
Súrya, or sun-worship in the Himálaya, 722, 704, 724 : title of Kishna, 716 : one with Siva, 726 : sanctioned by Sankara, 770 : in Kumaon, 804 : see 'Aditya,'	[850, 858, 886, 894
Súrya deva dynasty in Khás-panto ...	429, 439
Súrya-Náráyan, the sun-god	... 804
Surya Siddhánta in use	... 845
Sús tribe of,	360, 397, 399, 403
Su-Sanyáma, title of Yáma	... 292
Sushoma river	... 273
Suswa river	... 338
Súta relates the Puránas	... 297
Sútra period ...	... 271
Sútra-pitaka of the Buddhists	... 747
Sutudri river, 273, 359 : see 'Satadru.'	
Suvarna-bhumi, 285, 290, 359, 362,	376, [458
Suvarna-gotra in Tibet,	452, 455
Suvarna-prabhása, Buddhist work...	759
Suvarna river of Wilford	... 313
Sváha, deity ...	302, 884
Svastika, emblem of the Lichchhavis and used by Bons ...	... 765
Svasti Váchana, ritual of,	873, 877
Svetambara Jainas ...	... 420
Sveti river ...	... 272
Swadha, a goddess, ...	798, 884
Swallow ...	52, 72
Swamp deer ...	... 28
Swarga or paradise ...	... 290
Swát or Ouchang, 296-7, 429-31 : river ...	273, 385
Swayambhunáth of Nepál, 773 : ling ...	775, 825
Sweta mountains ...	289, 294, 297
Swetodara mountains ...	294, 297
Swift ...	... 53
Swinhoe, on birds ...	... 73
Syámá, a name of Káli	798, 812
Syámakas, tribe ...	295, 359
Sykes, fishes of the Deccan	... 76
Syúnara, Katyúris of,	527, 535, 539
Szema-tsien, Chinese historian	398, 401

T.

Tadúsur, title of Siva ...	... 782
Ta-hia (Baktria) in Chinese authors,	397, [399, 400
Tahora or Attak	... 358
Tailor-bird ...	... 61
Taittiriya Bráhmana ...	793-4
Takht-Bahi inscription	... 406
Takla Khar, fort of, capture ...	567
Takman deity ...	... 274
Takoraioi of Ptolemy,	356-7, 511
Ta-khue name of Yueh-ti kingdom,	428
Takshák, the Nága, 281, 297, 299, 315,	373
Talájhanga tribe ...	... 280
Tallades Bhábar annexed	... 522
Támádhaun in Kumaon, inscription at,	536
Tamasas, a tribe ...	358, 364
Támravarna, part of Bhárata	... 293
Tanba-Dhond, action with Gorkhális at ...	... 592
Tandi, the Rishi, ...	721, 780
Tanganapura of the grants	... 472
Tanganoi of Ptolemy, 354-7, 359, 362, 378 (note).	
Tangura Ghát, occupied by the British,	649
Tankara mar Jageswar, 301-2, 310, 315,	[317, 825
Tantras, 723, 740 : Buddhist, 465, 518, 750, 758 : Saiva, 758, 761, 797 : teaching, 860, 865 : a fifth veda to Saktas, 736 : objects of, 759 : translated into Tibetan by Indian teachers, 761 : certain admixture with the Bon religion,	764, [876
Taotse, sect in China ...	... 767
Tapkeswar, a title of Siva	... 781
Tapuban in the Dhauli valley,	284, 471, 786

Page.

Tára, a goddess 761
Tarágis of Káli Kumaon, 508: aid in invasion, ... 647
Tarái, ancient ruins in the, 443: rulers of the, 495: annexed by Gyán Chand, 522, 542, 545-50, 565-6, 590-4: usurped by Nand Khán, 596-7: falls to Oudh, 598: Batten on the Tarái, 599, 600: Nepál.
Táraka, an Asura, 299, 304, 310, 713
Tárânáth on Asoka, 351, 377: on the Turushkas, 392 (note): Yavanas, 395: on Vasubandhu, 423-4: on the Pálas 488
Tárikh-i-Dáúda on Kumaon ... 537
Tárini, title of Durga 794
Tárkshya, (garura), ... 790, 805
Taxila inscription 406
Taylor on the date of Sankara Achárya 464
Teal 71
Tehr or wild goat 33
Temple statistics of Kumaon, 701, 809-12: Garhwál, 701, 811: Dehra Dún 701, 812
Teru 72
Thákurdwára in Káshipur 582, 588
Thákuri Rájas of Nepál 496, 511, 515
Thal Baleswar in Sira ... 310, 313
Tha-li-lo or Dárel ... 429, 431
Thal kedár, temple of ... 810, 851
Thápa party in Nepál 613, 641, 668-70
Thár or forest goat ... 33, 45
Thárus of the Tarái, 270, 371, 591, 600
Theobald on snakes, 78: on shells... 90
Thobar Chand, Rája 503
Thomas on the Katyúris, 381: Bactrian coins, 389, 738: inscriptions, 406
Thorell on scorpions 96
Thrush, 58, 72: tit 63
Thysanura 100
Tiaou-chi or Sarangia 402
Tibet, 267: local names of rivers in, 292: little Yueh-ti take refuge in, 402: history of, 459: silkwork introduced, 509: invasion, 573: gold mines in, 377: Chinese occupation, 610: trade with, an object of interest to the British, 643, 668: Buddhism in, "see Buddhism: pre-Buddhistic religion of, 764
Tibetan fauna ... 35, 47
Tiele Prof. on animism, ... 702
Tiger, 13, 45, 540: deaths from the attacks of, and other wild animals, 14
Tiger-beetles ... 104-5, 117
Tiger-cat, 17; Tiger-spotted civet cat 19
Tihri, places in, 339-41, 527; formed, 680
Timla forts occupied by the British, 655

Page.

Timúr in Kábul, 434: in Siwáliks, 524
Tirthakas, sect of ... 765, 767
Tit, 63: lark 63
Tithi or lunar day 846
Titles of the Pandukeswar grants ... 479
Tochari, tribe, 353, 396-7, 401, 405
Tolas or sprites 833
To-li or Darel 429
Tons river ... 337, 362
Toramána a Rája 417
Tortoise-beetles, 116, 146
Trade in shawl-wool 41
Traill, G. W.—Assistant to the Commissioner of Kumaon, 667: in Garhwál, 681: Commissioner, 678, 683-5, [833
Traill, on the Rájis, ... 365
Tree-cat, 19: tree-rat, tree mouse .. 24
Tree-creeper, 56: warbler ... 62
Trees in the sacred Badari ... 295
Trident of iron at Gopeswar, 330; Bárahát, 453: in local worship ... 326, [868
Trigartta or Kangra 358-9
Trikanda-sesha 754
Trimal Chand, Rája 560
Trinetra, three-eyed, title of Siva, 303, [781
Trinity, notion of a, unknown to the Vedas 706
Tripura-Sundarí, epithet of Durga, 796
Trisanku, epithet of Satyavrata ... 279
Trishi-sarovara, name of Naini Tál, 317
Trisúl, mountain, 294, 792: of the Mallas at Bárahát, 453, 512: at Gopeswar, 330, 513, 776: at Kathmándu, 514, 825, 868: Tarái, 673-4 [676-9
Trivikrama, deity 906
Triyugi-Náráyan, 305, 327-8, 788, 813-14
Trogus Pompeius, epitome of, 391, 396
Tryambaka, title of Siva ... 793
Tunganáth in Garhwál, 229, 770, 774, 811, [869
Turks of the early middle age, 427, 432
Turnip-fly 116
Turushkas, tribe, 353, 403, 407, 410, 416 [427, 433, 467, 738
Turvasu, descendants of ... 279
Tushára or Tukhára of the Puránas, 384, [393, 397, 426, 431, 438
Tushti, 299: a goddess ... 884
Tytler on Paradoxurus, 47: on snakes, 78

U.

Uda title amongst Kators ... 434
Udáyana Achárya, reformer ... 466
Udeswar temple in Sálam, 811: grant to 591

	Page
Udyána or Swat	431
Udyán Chand, Rája ... 527, 534,	548
Udyot Chand, Rája ... 567, 569,	605
Udyot Chandeswar, temple of ...	810
Ugrasena, father of Kansa ...	719
Ugratára, title of Siva ...	322
Ugresa, title of Siva, 322, 721: on coins, 737: his Sakti, 798: Ugra Rudra 811,	927
Ugyára Mahárudra, festival of ...	851
Ugyári, temple to	812
Ukhimath in Garhwál ... 730, 775-6,	806
Ulakas, tribe	296
Ulka, a title of Káli	798
Ulkagarh, action near, in Garhwál...	605
Ulúpi, the Nágini	281
Uma, wife of Siva, 304, 322, 725, 761, [771, 785, 790, 793-4, 813, 849,	869
Upagupta, Buddhist teacher ...	751
Upamanyu, the sage ... 283, 710,	721
Upanayana, ritual for	893
Upanishads ... 271, 768-9,	790
Uparde, local deity, ... 801,	849
Upásakas or Buddhist laity ...	749
Upendra, the younger Indra, 709, 748,	887
Upharni, a name of Nanda, 798,	813
Uphráyini, a goddess	801
Upretis of Gangoli ... 540,	557
Uragas, a Naga tribe, 295: in Urgam 775,	785
Urga in Nepál	609
Urundhati, wife of Vasishtha ...	302
Urupa, country	296
Ushá, the wife of Aniruddha, 729-30,	813
Ushávana, city of Bána ...	730
Usinara, country ... 313,	359
Utkala khanda of Skanda purána ...	287
Utsavasamkatas	279
Uttara-kurus, 273, 278-9, 285, 289,	292, [353
Uttara-madras	273
Uttaráyini festival	872

V.

	Page.
Vàch, a goddess ... 273,	299
Vaibhojas, a tribe	279
Vaibhrája, forests of	294
Vaidyanáth or Baijnáth temple, 520: Siddh, ... 832,	859
Vaikanka, country ... 294,	296
Vaikuntha, title of Vishnu ...	789
Vairátnagar	443
Vairochana, the Buddhist deity ...	753
Vaishnava temples in the Himálaya, 701: tenets, 723: contest with Saivas ... 724,	731
Vaishnavi, Sakti of Vishnu, 801, 819, 871: Puráns	286
Vais Thákurs of Nepál, 496, 511, 516,	606
Vaivaswata, 299: Yáma, 292,	297
Vajraká mountain	296
Vajra-páni, Buddhist deity, 753, 759,	890
Vákátaka, a Greek state, 384, 393,	491
Vákeswar or Bágeswar in Kumaon ...	469
Vallabhis of Gujrát, 410: see Ballabha.	
Valerian's capture by Sháhpur ...	426
Vámáchárís, the Sákta ...	865
Vámana, avatár of Vishnu, 708,	906
Varáha, avatár of Vishnu, 288, 708, 784, [855-6, 887,	920
Varáha-mihira, astronomer, 394, 413,	419
Varáha Puráns, 286: country ...	295
Varáhi devi, goddess, 760, 801, 812, 819, [850	
Vararuchi, writer	283
Varavarnini, epithet of Durga ...	794
Varshneya, title of Krishna ...	716
Varuna, portion of Bhárata, 293: deity, 292, 299, 300, 747, 773, 886, [894-5	
Váruni, goddess of wine, 304, 319,	320
Varvaras, tribe ... 279,	795
Vasáti near the Indus, 358, 376: people	280
Vasishtha, sage, 277, 279-80, 298, 302, [217, 320,	805
Vassilief on Buddhism, translated by LaComme ... 488,	755
Vasubandhu, the Buddhist sage, 408, 423, [753	
Vásudeva of the coins, 405-7: the deity, 706, 711, 714-15, 718: true and false, 731-2: in Garhwál, 732, 785, [814, 887,	906, 919
Vasudhára, mountains 294,	296
Vásuki, the Naga, 281, 299, 318, 782, [835-7, 845,	856
Vasumati, country	296
Vasus, 295: sprung from Krishna, 716, [732,	886
Vátadhanas, a tribe ... 358,	361
Vatoshpati, deity	900
Váyu, deity, 292, 297, 705: title of Krishna, ... 716-7, 790,	894
Váyu-Purána, 286, 288, 292, 319, 357, [384, 393, 458, 726, 806,	836
Vedángas	271
Vedánta-Sára, system of philosophy,	768
Vedárambha, ceremonial of ...	905
Vedas, Himálaya in the, 271: geography of the, 272: not a bible to the masses in India, 280, 700: reviled by the Saivas, 727, 732: considered insufficient by Buddha, 744, 761, [863	
Vedavyása avatár of Vishnu ...	708
Vena or Ben Rája	300
Venumat, country	296

Page.

Videha or Tirhút, ... 361, 372
Vidhyamantramayi, goddess ... 730
Vidísa, a state 395
Vidyádharas genii, 296-7, 300, 320-9, 754
Vijaya, epithet of Durga 794, 801
Vijaya-rájya, of the grants, 472, 491, 516
Vikhpati, festival 869
Vikrama Chand, Rája 528
Vinata, mother of Garura ... 804
Vinaya-pitaka of the Budhhists on discipline ... 747-50
Vindhyas, hills, ... 293, 805, 866
Vipásá river 294
Viperine snakes 77-8
Vipula, a goddess 889
Vipula mountain 289
Virabhadra at Daksha's sacrifice ... 725
Virochana, the Deity ... 299, 729
Virupáksha 292
Visakacha mountain 297
Vishnu, an Aditya, 299: worship of, in the Himálaya, 701: in the Vedas, 704: in the Itihása and epic periods, 707: avatárs of, 298, 332, 707: as Ráma, 708: as Krishna, 709-20: interpolation in epic poems regarding, 722: bow of, 724: at Daksha's sacrifice, 725-8: the contest with Bána, 729-30: with Saivas at Benares and the false Vásudeva, 731: reconciliation with Siva, 733: must have been less popular with the masses, 738, 758: sanctioned by Sankara, 770: curses Brahma, 771: temples to, 793-8: names of, 789-90: birth of Ganesha, 803: list of temples, 813-14: festivals ... 851, 886
Vishnu prayág ... 832, 860
Vishnu purána, 286, 288, 292, 319, 357, 384, 393, 458, 707, 713, 731, 786, 805, [805-6, 836
Vishuddha, mountain 295
Visvakarma 706, 718, 747, 779
Visvámitra, sage, 274, 277, 279, 894
Visvanáth, title of Siva, 776, 811, 858
Vitasta river, ... 273, 294
Vithoba affiliated to Siva ... 738
Vole, Himálayan, ...24, 47
Vrátyás outcastes, ... 280
Vrihaspati, sage 295, 320, 487, 797: Jupiter ... 898, 919
Vrinda a name of Káli ... 797, 812
Vrishalas, outcaste ... 279, 282, 381
Vrisha bhánka Sankara, title of Siva, 296
Vrishbhekshana, title of Vishnu ... 789
Vrisha vatsa, country 295
Vrishnis 716
Vritiya river 294
Vultures 49, 72

Page.

Vyaghreswar or Bágeswar in Kumaun, 469
Vyáhriti mantra 875
Vyása, sage, 281, 297, 310, 343, 752

W.

Wagtail 62-3
Waigalis of Káfiristan, ... 437
Walckenaar, on spiders, ... 96
Walden, on birds 78
Wallace, on geographical distribution of animals 2
Warbler 61
Wardak inscription 405
Wasps 244
Water-hen, 70, beetles ... 105
Wax-bill 65
Weasel 12, 47
Weaver-bird 65
Weber on Charaka, 274: route of the Aryas, 977: date of Sankara, 464: Vaidik trinity, 706: Satarudriya, 720: on Buddhism, 742, 749: on Uma 791
Weevils ... 112, 138
Westwood, on insects 101
Wheeler, on the Nágas... ... 374
Whirligigs, beetles ... 105, 121
White-ants 180
White Huns of the Kábul valley, 427 8
Whitney, Prof., on the Pasupati form of Siva 734
Wilford on the Skánda purána, 288: Mount Caucasus, 377: Vikramáditya, 412: Pála inscription ... 489
Williams, G., list of Garhwál Rájas, 447
Williams, M., on Vedantism, 768, on village deities 480
Wilson, on Entomology ... 101
Wilson, H. H., on the Puránas, 287, 394: on Sankara Achárya, 463-4 on Mahábhárata, 722-3: on Bána, 730: Nepálese Buddhism ... 763
Wolf, 20: Tibetan 35, 47
Wood chat 61
Woodcock 69
Woodpecker 54, 72
Wool, shawl, and Bhotiya, 41: manufactures 42
Wren, 85: Warbler 61
Wry-neck 55
Würshik of Hanza and Nagar ... 437
Wu-sun 400-1

Y.

Yadu, Krishná's tribe, 712, 718
Yageswar: see Jageswar.
Yájnavalkya, story of 832

	Page.
Yákshani, a goddess, ...	798, 812
Yakshas, tribe of Himálaya, 290, 296-9, [353, 376, 409, 716, 748, 756, 759	
Yak, or *ban chaur*, 35, 77: tame, 35: domestic and crosses, ...	38
Yáma, 292: title of Krishna, 716, 795, [855, 894	
Yamuná, river, 294: a mountain, 358, 361, [364, 372	
Yaudheya, Júd district ...	359
Yárkand river, 292, 401, 429, 512	
Yaska, grammarian ...	274
Yasoda, foster mother of Krishna, 712, 794	
Yassan, Doms of, 300: Kators of 381, 435	
Yavanas, Baktrian Greeks, 270, 279-83, 282, 341, 356-8, 361, 385, 400, 409, [422	
Yesh kun of Hanza and Nagar ...	
Yetha, tribe, 428-30: 437: See 'Yueh-ti'	
Yita, tribe, 428: See 'Yueh-ti' ...	
Yoga, Sati dies by, 726: school, 742-4: [759-60, 808, 860	
Yogáchárya school of Buddhism, 753-4: *Bhúmi Sástra* of Aryasanga, 754, 760, [762	
Yogi-nidrá, sleep of meditation ...	795
Yog badri, temple, 784, 787,	814
Yoni: See 'Linga'	
Yudhishthira the Pándava, 281, 711, 713, [716, 732	
Yueh-ti, a branch of Tochari, 353, 397: from Chinese sources, 398, 400: history of their expulsion by the Hiung-nu, 401: the little take refuge with the Tibetans, 402, 428: in Kashmír, ... 409,	426
Yule on the Bons	766
Yun drun, the svastika used by Bons,	765
Yusufzai inscription	405
Yuyutsu, Rája of Indrapastha ...	281

Z.

Zariaspa	403
Zoology, vertebrata, 1: invertebrata, 87: references to works on local, will be found after each section: lists given neither exhaustive nor on a level with the present state of our knowledge ...	

Digitized with financial assistance from

on 07 January, 2017